

T H E
FARMER, HUSBANDMAN,
and LABOURER'S
Land Measurer :

O R,
LAND MEASURING made
easy to the meanest Capacity.

That any One that can read and will follow
those Instructions, may measure by a Table,
Land and most other Things that are to
be measured.

W I T H
INSTRUCTIONS for those that can do
the first Four Rules in Arithmetick, how to
measure and set out any Piece of Land, and
cast it up several Ways.

W I T H
TABLES, shewing what maketh an Acre at
any Length, at Sixteen Foot and a half to the
Perch, or Eighteen; with a Table for Gauging,
and several other Tables very useful and ne-
cessary: With the Use of the Carpenter's
plain Rule in measuring Timber and Board.

By a FARMER.

L O N D O N :

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1808/4642.

HARLES H. BARNARD
AND J. L. BARNARD
Land Measurer

J. and M. BARNARD
City of the District of Columbia

That we have surveyed and measured
the following land in the District of Columbia
and have found it to contain
the following amount of land

INSTEAD OF THE
the following land in the District of Columbia
and have found it to contain
the following amount of land

T. and M. BARNARD
City of the District of Columbia
and have found it to contain
the following amount of land



T H E

P R E F A C E.

M *Easuring of Land is what all Persons that use Farming or Husbandry; ought to know something of: For there is none but what have occasion for it at some time or other; the Farmer for Plowing, Sowing, Reaping, Mowing, Houghing and several other Things; the Husbandman or Labourer for doing the Work. A great Part of it is done by the Acre; yet very few of them can set out any irregular Piece of Land to measure, which is the greatest Art of a Measurer. Indeed some that have learned Arithmetick, can cast it up when they have the Dementions, but know not how to set out it to take the Dementions. There be a great many of those Persons that can read, but cannot write or cypher: For the use of those Persons chiefly I have compiled these Tables, and writ these Instructions; for I have known them great Losers for want of Knowledge in this Art. Of all the Books I have seen of measuring Land, there is none that have shewn how to lay out a Piece of Land, and to measure it on the Ground in a Manner that they could understand.*

The P R E F A C E.

As it is chiefly intended for those that cannot write nor Cypher, I have begun the first Chapter with Notation and Numeration, to shew how to read Figures, and to know their Denomination.

Chapter the 2d shews what Squares and Triangles are, and how to set them out and measure them.

Chapter the 3d sheweth how to set out and measure any irregular Field or Piece of Land, there being several Figures drawn, and numbered with Letters and Figures, and marked with Lines as they should be measured, with the Description of a Quadrant to set out the Angles, and a Cross to space with; and of the Chain how it should be divided, and how to measure with it.

Chapter the 4th sheweth them that can work the four first Rules in Arithmetick, how they should measure any Piece of Land and cast it up in whole Numbers or Fractions, Vulgar or Decimal; and to find what in breadth maketh an Acre to an Inch at any length, and explains three Figures, two very irregular ones, and the other the Ground-work of all superficial Measure.

Chapter the 5th, sheweth the Use of the Carpenter's plain Rule, with Gunter's Line to be used with Dividers, to measure Timber or Boards, with Centers to measure several Sorts of Measure, and to find the Circumference or Diameter of a Circle, and to find the Content
of

The P R E F A C E.

of a Circle, or any Part that the Diameter goeth to the Center.

Table the first, telleth the square Perch, the Acres, Quarters and odd Perches, from two square Perches to 80 at one look.

Second, is a Table for odd Measure, as half Quarters, Quarters and halfs, and thrce Quarters.

Thirđ, is a Table to halve any Number to 223 in length.

Fourth, is a Table to tell the Number of Perches in any Number of Acres from one Acre to 40, and the Number of Perches in every Quarter of an Acre from one to 40 Acres.

Fifth, is a Table to set out Statue Acres to an Inch in breadth, at any length to 120 Perches.

Sixth, is a Table to set out Acres, either Statute or Customery, let the Perch be of what length it will, to the 100 Part of a Perch.

Seventh, is a Table for gauging any Cask or open Tub, to know what Ale Gallons it holds, with the Explanation of each Table with it.

The Perch made use of in this Book is the statute Perch, but as there are several customary Perches used in England, I have shewed how to measure any Piece of Land by either of them.

E R R A T A.

Pa. for page, l. for line, Sq. for Squares, A. for Acres, Q. for Quarter
P. for Perches, Sect. for Sections.

Page the 47. line 30. r. Half-pence in that and the next Page.

Pa. 116. l. 9. r. above.

Pa. 117. l. 17. r. 8.

Pa. 118. at 32 in the Diagonal r. 5. P.

Sect. 4. at 21. in the P. r. 4.

Sect. 5. at 23. in the A. r. o. the Q. 2.

Sect. 7. at 79. in the P. r. 33.

Sect. 8. at 25. in the Q. r. 1.

Sect. 9. at 38. in the P. r. 22.

Sect. 10. at 36. in the Sq. r. 360.

Sect. 10. at 45. in the P. r. 10.

Sect. 14. at 78. in the P. r. 12.

Sect. 15. at 18. in the P. r. 30.

Sect. 15. at 19. in the P. r. 5.

Sect. 17. at 60. in the P. r. 20.

Sect. 17. at 70. in the P. r. 30.

Sect. 24. at 37. in the Q. r. 2.

Sect. 28. at 31. in the Sq. r. 868.

Sect. 30. at 46. in the Sq. r. 1380.

Sect. 30. at 67. in the P. r. 10.

Sect. 30. at 68. in the A. r. 12.

Sect. 35. at 55. in the Q. r. 6.

Sect. 37. at 66. in the Sq. r. 2442.

Sect. 41. at 78. in the Sq. r. 3198.

Sect. 49. at 80. in the Q. r. 2. r. 80.

Sect. 52. at 80. in the A. r. 26.

Sect. 57. at 57. in the Sq. r. 3249.

Sect. 61. at 64. in the A. r. 24.

Sect. 62. at 76. in the A. r. 29.

The Author living a great Distance from the Printer, these Errors have
escaped the Press.





T H E
COUNTRYMAN'S
Land Measurer, &c.

CHAP. I.



Shall begin first with Notation, and Numeration, which is to know and understand Figures and Numbers exprest by Figures. In the first Place there are nine Figures and a Cypher maketh ten, as followeth.

one two three four five six seven eight nine ten

1 2 3 4 5 6 7 8 9 0

The nine Figures count for so much as they are marked for: But the Cypher or 0 stands for nothing when it's set on the Left Hand of a Figure; but when it standeth on the Right Hand of a Figure, it maketh that Figure count for as many tens as it is ones. 2 counts for twenty, 20 put a Cypher to

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to it, 4 for forty, 5 for fifty, and so for the rest. If there were any other Figure set on the Right Hand of that it would count for what it is marked for; as set 3 on the Right Hand of 2 it will count for twenty-three, 23 or set 5 on the Right Hand of 4 it will count for forty-five, 45 that is for four tens and five ones, though a Cypher counts for nothing on the Left Hand of a Figure, yet every Figure put on the Left Hand of it, and every other Figure to the Left Hand counts for as many tens as it is marked ones.

The first Figure on the Right Hand of any number of Figures is called a Unit; that is so many ones as it is marked for: The second is called tens, that is so many tens as it is marked for ones. The third is called hundred, that is so many hundred as it is marked for ones. The fourth is called thousands, and is so many thousands as it is marked for ones. The fifth is called tens of thousands, and is so many ten thousands as it is marked for ones. The sixth is called hundreds of thousands, and is so many hundreds of thousands as it is marked for ones.

Always observe that a Cypher standeth for nothing in any Place, but to keep the other Figures in their right places. When you are to count any number of Figures, begin at the Right Hand, and name them to the Left. As suppose 586742 begin at the Right Hand, and say; units, tens, hundreds, thousands, tens of thousands, hundreds of thousands; these



these you must get by heart. Then begin at the Left Hand and count them back; five hundred, eighty six thousand, seven hundred, forty two: The same for any number of six Figures, which is enough for any number in this Book. As suppose the Date of the Year 1750, begin at the Right Hand to name them, units, tens, hundreds, thousands; 1 thousand, 7 hundred, and fifty: The unite is a Cypher, and always is when the number ends with an even ten.

Numbers to be read or written, 59 fifty nine; 342; three hundred forty two, 7072 seven thousand seventy two, no hundred, 18202 eighteen thousand, two hundred, 0 nothing but two, 202022 two hundred and two thousand, 0 hundreds but twenty two.

Sometimes Numbers are express'd by Letters, as I signifies one, V signifies five, X ten, L fifty, C one hundred, D five hundred, M a thousand. The Date of the Year in Letters, MDCCL. Sometimes you will meet with parts of a Number which are set one upon another, and a Line drawn between them; they are called Fractions, as the upper $\frac{1}{4}$ is called the Numeration; the lower is called the Denominator, as $\frac{1}{4}$ is a quarter of a whole Number, $\frac{1}{2}$ is half a whole Number, $\frac{1}{3}$ is a third part of a whole Number, $\frac{1}{5}$ is one fifth part of a whole Number, $\frac{1}{6}$ is one sixth part of a whole Number, $\frac{1}{7}$ is one seventh part of a whole Number, $\frac{1}{8}$ is one eighth part of a whole Number, $\frac{1}{9}$ is one

B
ninth

ninth part of a whole Number. These are called vulgar Fractions: There are another sort of Fractions called Decimals, as $\frac{1}{10}$ is one tenth part, $\frac{1}{100}$ is one hundred part, $\frac{1}{1000}$ is one thousand part; these are set on the Right Hand of a whole Number, and dated between; as 15,2 is fifteen, and two tenth parts for hundred parts, they set two Figures as 15,02 is fifteen, two of a hundred parts, or 15,24 is fifteen, and twenty four parts of a hundred. Thus you may know any Fraction, and what part of a whole Number it is. There are several Characters or Letters set over Figures to tell what Denomination they are of; as any Sum of Money they write *l.* over Pounds, *s.* over Shillings, *d.* over Pence, *ob.* over Half-pence, *qr.* over Farthings, thus.

l. s. d. ob. qr.
5 12 7 1 1

That is five Pounds twelve Shillings seven Pence one Halfpenny one Farthing; some set the Half-pence and Farthings by the Pence, $\frac{1}{2}$ for a Half-penny $\frac{1}{4}$ for a Farthing $\frac{3}{4}$ for three Farthings; for other Things they write the first Letter of the Denomination they are of: For Land they write *A* over Acres, *Q* over Quarters, *P* over Perches, Figures are set in Lines and Columns, Lines as they write Columns are from Top to Bottom: As suppose a Bill, the Pounds Shillings and Pence are writ in Columns as a Bill.

	<i>l.</i>	<i>s.</i>	<i>d.</i>	<i>q.</i>
for	10	12	6	3
for	03	08	7	2
for	02	09	5	0
for	01	00	3	1
for	00	18	10	2
	18	07	7	0

To cast it up, begin first with the Farthings and say, 2 and 1 is 3, and 2 is 5, and 3 is 8, that is 2 Pence.

Then begin with the Pence, and say, 10 and 3 is thirteen, and 5 is eighteen, and 7 is twenty

five, and 6 is thirty one; that is two Shillings and seven Pence.

Then begin with the Shillings, and say, 18 and 9 is twenty seven, and 8 is thirty five, and 12 is forty seven; that is two Pounds and seven Shillings: Then begin with the Pounds, and say, 1 and 2 is three and 3 is six, and 10 is sixteen, that is sixteen Pounds, then put them together, begin with the Farthings, 8 Farthings is 2 Pence, which carry to the Pence, it maketh them thirty three, which is 2 Shillings and 9 Pence, mark down the 9 Pence, and carry the 2 Shillings to the Shillings, and it maketh them forty nine, that is 2 Pounds 9 Shillings, mark down the 9 Shillings, and carry the 2 Pounds to the Pounds, which maketh them eighteen, that the Sum is

l. s. d. qr.
18 9 9 0

This I think is the best way for any Person to cast up a Bill that cannot write; or they may put them together as they cast them up. I think for those that cannot write, the best way for to mark down any Number,

is to do it with a Pencil on Paper or a Slate Book, there they may rub them out when they have done: They may soon learn to make the nine Figures that they may understand them, which will be best; if they follow the Directions in this Book, they may measure any piece of Land as true as any one that can cast Accompts ever so well.

The Numeration Table to nine Figures.

4	5	6	7	8	9	0	1	2	9	C of Millions
	4	5	6	7	8	9	0	1	8	X of Millions
		4	5	6	7	8	9	0	7	---Millions
			4	5	6	7	8	9	6	C of Thousands
				4	5	6	7	8	5	X of Thousands
					4	5	6	7	4	---Thousands
						4	5	6	3	---Hundreds
							4	5	2	---Tens
								4	1	---Unites

Learn these by heart.



C H A P. II.

ALL Pieces of Land may be reduced into Squares or Triangles, though the Learned have described several other Figures; but there is no occasion for any but these two before mentioned, for to measure any piece of Land on the Ground, as I shall shew you.

you. Most Fields are made in long Squares, and the Hedges often very crooked, which maketh them troublesome to measure. The first Figure is a long Square with strait Sides and right Angles; to measure this only take the length in the middle; as suppose 56 Perch and the breadth cross the middle, as suppose 37 Perch, look in the Table as before directed you will find it.

A. Q. P.

12 3 32

The 2d Figure is a long Square divided into two Triangles, to shew that all Triangles are half the Square, that their Base and Perpendicular maketh and are equal. As suppose the Square be 40 Perch in length and 20 Perch in breadth, look in the Table you will find the Content.

A. Q. P.

5 0 0

For the Sides, A. B. and C. D. are the two Bases of the two Triangles, and A. C. and B. D. are the two Perpendiculars, take half the Base A. B. which is 20 Perch, and the whole Perpendiculars which is 20 Perch, look that in the Table you will find the Content,

A. Q. P.

2 2 0

which is half the Square; the other Triangle will be the same.

The third Figure is an equal side Triangle marked with A. B. C. you may make any Side the Base, and a Line from the middle of the Base will fall on the opposite Angle,

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as you see the prick'd Line doeth, that is the Perpendicular.

The 4th Figure is a Triangle with unequal Sides, there you can make but one Side the Base, because you cannot raise a Perpendicular off from any of the other Sides to fall square into the opposite Angle. B. C. is the Base and the prick'd Line is the Perpendicular: As suppose the Base 45 Perch, the Perpendicular 28 Perch, take 45 for the Length, and half 28 which is 14 for the Breadth, and look in the Table you will find A. Q. P.

3 3 30

The Content you may take either half the Base, or half the Perpendicular. Take the even Number if any of them be even to avoid halves: The best Chain for common use, is a Chain of two Perches in length divided into twenty Links each Perch; a Link will be near 10 Inches, 15 Links will be 3 quarters of a Perch, 10 Links will be half a Perch, 5 Links will be a quarter of a Perch, two Links and a half will be half a quarter of a Perch, or a piece of Cord for want of a Chain, and stretch it and make two Handles to it, one to let out and take up if it should stretch or shrink, you may try it with a half Perch at any Time; or if you take 2 strait Sticks five Foot ten Inches in length, and fit them exactly cross one another, that will space one quarter of a Perch at one Space, a Perch at 4 Spaces. When you go to measure with a Chain,

Chain, the formost Person must carry 10 small Sticks in his Hand, and stick them one at the end of every Chain; the hindmost Man takes them up, and when they are all out it's 20 Perch: Then the foremost Man must take them again, they must go to some Mark, and from some Mark that they may direct one another to go strait, for if they go crooked, they make more of it than it is, and that will make the Content more than it is. If you would measure a piece of Land upon the Ground true, you must get a piece of Board with one square Angle, in the shape of a quarter of a Circle like Figure the 10th which call a Quadrant, let it be 5 or 6 Inches on the Sides, and bore a Hole through the middle to pin it on a Stick to keep it steady.

When you go to measure a Field, if there be ever a right Angle, or a strait Hedge, begin at that; and set your Quadrant to look strait with the Hedge to the next Angle, and mark where the other Side points, that makes a right Angle as in the Figure. 6. Set your Quadrant up at A and point one Side of your Quadrant by the Hedge to B and keep it steady, and look on the other towards the Angle D, and where that points is a right Angle; the same if you are to raise a Perpendicular of a Triangle, as Figure the 4th is a Triangle to raise a Perpendicular. Go along the Base and try with your Quadrant till one Side is strait with the Base,
and

and the other Side points into the Angle A and that is the true Perpendicular. You may go round the Field before, and mark and set out the Angles and find the Perpendicular; then you will have nothing to do but to measure the Lines and cast up the Content.

But the first thing that you do, is to get to be very perfect in Notation and Numeration, that you may read any Number of Figures and tell of what Denomination they are of, and what they stand for, which you may very soon learn if you apply yourself to it. When you have learned the first Chapter perfect, and can tell any Number of Figures, and what they stand for: Then look over the Tables and learn to find any Number in them, and make yourself well acquainted with them. Then you may go to measuring, but be sure to learn the use of the Tables perfect, that you can turn to any Number readily, and you will find it very pleasant to find every thing ready cast up for only turning to them; which when you have learned the Rules you will do it with a great deal of pleasure.



C H A P. III.

Observe the Directions, and now I will shew you how to measure any irregular Field, as Figure the 6th. The black
Lines

Lines are the Hedges, and the prick'd Lines are the Lines that you are to measure the Field by; the Angles or Corners of the Field are marked with capital Letters, and the Offsets with small Letters. Always begin the Field at the right Angle if there be ever a one; begin this at the Letter A which is a right Angle, and measure by the Hedge towards the Letter B; but when you come square with the Angle C, which you must try with your Quadrant, and you will find it at a; mark that length, suppose 28 Perch, then measure from a to B which suppose 4 Perch, mark that length; then measure from a to C which suppose 32 Perch, mark that, which is the Base of the Triangle between that Line and the Hedge; and a B is the Perpendicular: Take half the Perpendicular which is 2 for the breadth, and 32 the Base for the length. Look in the Table you will find A Q P the Content of the Triangle, mark 0 1 24 that down: Then measure square from C to D; but there is an Offset between C and D in the shape of a Bow, which you must measure cross from the middle of your Line; as at B square to C, suppose 10 Perch, you must allow that Line to be longer than to the Hedge, because the Hedge bows round as you see by the prick'd Lines c C, and c D, or that Space between them, and the Hedge will not be measured. Then measure one to D, suppose 26 Perch; then take half the Line b c 5 Perch for the breadth, and the

C

Line

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Line C D for the length, and look in the Table you will find

A. Q. P.

0 3 10

the Content of the Offset, mark that down, then measure from D to A. There are 2 Offsets, one 22 Perch in length, the breadth 4 Perch; the other 8 Perch in length, and 4 Perch in breadth: Take 2 which is half the breadth for the breadth, and 30 which is the whole length for the length, look in the Table, you will find

A. Q. P.

0 1 20

which is the same Thing as if you had measured them single. Put the Offsets together, begin with the odd Perches; and say 20 and 10 is 30, and 24 is 54, that is 1 Quarter and 14 Perch: Mark down the 14 odd Perches and carry the Quarter to the Quarters, and say; 1 and 1 is 2, and 3 is 5, and 1 is 6, that is

A. Q. P.

1 2 14

Then cast up the great Square, put the lengths together, and take the half for the length as 32 and 30 is 62, the half is 31 for the length: Then put the 2 breadths together for the breadth, that is 28 and 26 which is 54, the half is 27 for the breadth: Look in the Table you will find 27 Perch in breadth, and 31 in length is

A. Q. P.

5 0 37

And A. Q. P. is A. Q. P. the whole Content.

1 2 14

6 3 11

There

There are some Fields that have four Angles; but you cannot set a Square out in it as the Figure 7 marked A B C D. First measure a Diagonal Line from A to C 60 Perch, then take your Quadrant and raise a Perpendicular from that Line into the Angle B as at a. Then raise another Perpendicular off from that Line into the Angle D as at b. The Line A C is the Base of both the Triangles, 60 Perch in length the Perpendicular. a B is 14 Perch in length, the Perpendiculars b D is 12 Perch; take half 14 which is 7 for the breadth, and the Base 60 for the length, and look in the Table you will find

A. Q. P.
2 2 20

the Content of the first Triangle. Take 6 half the Perpendiculars b D for the breadth, and the whole Base 60 for the length, look in the Table you will find

A. Q. P.
2 1 0

the Content of the other Triangle; which put together maketh

A. Q. P.
4 3 20

the whole Content: If any of the Hedges should not be strait, you must measure a strait Line, and measure the Offsets by themselves as you do other Offsets.

The 5th Figure is an irregular Field marked A B C D E F G. You must set out one Triangle in it, from A to C, and from C to G, and from G to A; all the rest must be Offsets as the prick'd Lines direct. Begin first at A and measure to c 32 Perch,
C 2 measure

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measure square off from that Line to B 6 Perch, the half is 3, take that for the breadth, and 32 for the length; look in the Table you will find

A. Q. P.

0 2 16

the Content of the Offset. Then measure from C to E 32 Perch, and so to G 16 Perch. As you go along measure square off from that Line to D as at b 4 Perch, the half is 2 for the Breadth and 32 for the Length, look in the Table you will find

A. Q. P.

0 1 24

the Content of the Offset. Then measure square off from the Line to F 6 Perch, the half is 3 for the Breadth, and 16 for the Length is

A. Q. P.

0 1 8

the Content of that Offset. Then measure from G to A 66 Perch, which is the Base of the great Triangle: Then with your Quadrant raise a perpendicular Square off from the Base to the Angle C 28 Perch, that is 14 Perch for the Breadth and 66 the whole Base for the Length, look in the Table you will find

A. Q. P.

5 3 4

the Content of the Triangle. Then put them all together maketh

A. Q. P.

7 0 12

the Content of the whole Field. Those little Offsets you may cast up by your Head as you go along.

You

You may look in the Table to see whether you are right. Raising a Perpendicular is to stand on the Base with your Quadrant, and to set one Side strait with the Base, and the other Side to point square into the Angle. You must go backward or forward until you are square with your Angle; for if you do not go off square with your Angles, your Lines will be longer than they should be; that will make the Content more than it is, as you may see in Figure the 11th. The middle Line is a square Line, the others are some more than a Square and some less; but are all longer than the square Line, and consequently will make the Content more than it is, tho' when you have been used to measure, you may go near enough square for common Business; but when you are minded to be exact, which you should be in most cases, use the Quadrant. The first of the Figures joyning together, mark 8 is a Field bowing round, and is very troublesome to measure true; but if you measure it as the prick'd Lines direct, it will be near enough for common use; it is marked with A B C D. Begin at the Angle A, and measure to b 32 Perch; measure from b to B for the Offset 4 Perch; half is 2, and 2 times 32 is 64, square Perch is

Q. P.

I 24

the Content of the Offset. Then go back on the Line A b till you can go square to the middle;

middle of the Line C D, then measure to the middle of the Line C D 46 Perch; but in the middle of that Line measure cross exactly square with that Line 28 Perch; take 28 Perch for the breadth in the middle, and put it to 32 Perch; the other end maketh 60, the half is 30 for the length, and 23 for the breadth; look in the Table for the Content, you will find it

A. Q. P.

4 1 10

the first Piece. Then measure the end C D 26 Perch, which put to 28 maketh 54, the half is 27 for the length, and 23 the half of 46 for the breadth; look in the Table you will find

A. Q. P.

3 3 21

put them together makes

A. Q. P.

8 2 15

the content of the whole Field.

The next adjoyning Field marked 8 hath three strait Sides and one bowing Side, and is wider at one end than the other. To measure it, begin at A set out square from the Line A D to the Line B C at b 35 Perch; then measure from b to B 4 Perch, the half is 2 for the breadth, and 35 for the length, say 2 times 35 is 70 square Perch is Q. P.

1 30

the Content of the Offset. Then set off square to the Line C D as at G, and measure it 45 Perch; but when you have gone 20 Perch to c, measure square to the Hedge to d

12 Perch;

12 Perch ; the half is 6 for the breadth, and 20 for the length ; 6 times 20 is 120 square Perch or

A. Q. P.

0 3 0

the Content of that Offset. Then go 12 Perch farther, and measure square to the Hedge 16 Perch to f, put 16 to 12 the last cross Line makes 28, the half is 14 for the length, and 12 for the breadth ; look in the Table, you will find

A. Q. P.

1 0 8

the Content of that Offset. Then measure the end c G 14 Perch, put 14 to 16 is 30, the half is 15 for the length, and 13 for the breadth ; look in the Table you will find

A. Q. P.

1 0 35

the Content of that Offset. Then measure from G to D 37 Perches ; then measure from D to A 46 Perches for the length, put 45 to 46 is 91. There is a Table at the beginning of the Tables tells the half of any Number to 232, you will find the half of 91 is $45\frac{1}{2}$ for the length, for the breadth, put 35 to 37 is 72, you will find the half is 36 for the breadth, or if you take half the Difference of the two Sides and put to the shortest Side, is the same. Take $45\frac{1}{2}$ for the length, and 36 for the breadth, look in the Table you will find the Content

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A.	Q.	P.	Content of the whole Numbers
10	0	20	is, and half 36 is 18 Perch.
0	0	18	Then put the 18 Perch and
0	1	30	the four Offsets to A. Q. P.
0	3	0	10 0 20
1	0	8	the Content is
1	0	35	A. Q. P.

13	2	31	Some when they have several
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breadths will put them together and divide by the Number of breadths, and measure them all together; but this is often wrong, the true Way is to measure them and to cast them up single. The 9th Figure hath 4 Angles marked A B C D; but as one Side is longer than the other, it may be measured as one Square, or a Triangle and a Square, and it will be the same.

Begin at A and measure to B 45 Perch; then from B to C 53 Perch, then go back towards B till you can go square off to the Angle D as at a, measure to D 45 Perch, measure from D to A 41 Perch, the difference between 53 and 41 is 12, the half is 6; which put to 41, makes 47 for the length, the other Sides are equal 45 Perch, from A to B 45 Perch, from a to D 45 Perch for the breadth; look in the Table you will find

	A.	Q.	P.
	13	0	35

the Content : or take the Square by itself 47
Perches

LAND MEASURER. 25

Perches the length, and 41 the breadth;
look in the Table you will find A. Q. P.

11 2 5

the Content of the Square: The Triangle is
45 Perch in length, and 6 Perch in breadth,
look in the Table you will find A. Q. P.

1 2 30

Put the Content of the Square
to the Triangle, both the same
Content.

11 2 5

13 0 35

Thus you may measure any Piece of Land,
and cast it up by the Tables, tho' you do not
understand Arithmetick.



CHAP. IV.

THose that can write and work the 4 first
Rules in Arithmetick, may make use
of the Chain before mentioned of 2 Perch
in length; and each Perch divided into 20
Links; 2 of those Links are the tenth part
of a Perch, and are near 20 Inches in length.
You may work with it, either by quarters
and halves, or by Decimals: You may not
understand Decimals, but can cast up the
whole Number first, then the odd Measure
which commonly People do, and are taught
so by the Table to do. Half a quarter of a
Perch is near enough for common Use to

D

measure

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measure on the Ground, which I think is the best way, tho' not practiced by the learned in that way. When you measure on the Ground, you may cast it up together; one may cast by the Pen, another by the Table, and another by his Head. I have known several that could cast up a piece of Land by their Heads very quick, measuring with a Chain as before mentioned. There they may count the Quarters and Halves, and half Quarters as well as you the tenth Parts; for 15 Links is 3 quarters of a Perch; 10 is half, 5 is a quarter, 2 and half, is $\frac{1}{2}$ quarter. Suppose a piece of Land in length P.

35 $\frac{1}{2}$ and 27 $\frac{1}{2}$ in breadth.

$$\begin{array}{r}
 27 \frac{1}{2} \\
 \hline
 385 \\
 \hline
 110 \\
 \hline
 1485 \\
 41 \quad (4 \\
 \hline
 4) 152 \quad | \quad 6 \quad (38 \quad (9 \\
 12 \quad | \quad 0 \quad 36 \\
 \hline
 32 \quad 6 \quad 2 \\
 32 \\
 \hline
 \end{array}$$

A. Q. P.
(9 2 6
the Content
by the Pen.

By

By the Table length $55\frac{1}{2}$, the breadth $27\frac{1}{2}$, look in the Table you will find the Content

A. Q. P.

9 1 5

1 1

the Content 9 2 6

The same by the Head; so all may be satisfied. I have seen Workmen when their Work hath been measured by *Gunter's Chain*, enquire for the quarters and halves; and they have told them that they did not measure by them, they would be very much out of humour, and said that they were cheating them; but this way which I teach you, they may see their length and breadth as well as you: And if they can, may cast it with you, which will be Satisfaction to you all that mean honestly. I have shewed you before, how to lay out Land, and to take the Dimensions for measuring it, and to cast it up one Way by the Pen and by the Table, which are the common Ways. Next I will shew you how to cast it up by the Decimals: That is a Perch divided in ten Parts; you must set the whole Numbers.

CUSTOMARY.

STATUTE.

Feet

A. Q. P.

In 1 Acre 18 — is — 1 0 30 $\frac{1}{4}$

In 1 Acre 21 — is — 1 2 19 5

In 1 Acre 24 — is — 2 0 18 4

D 2

And

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And Decimals in a Line together; the Decimals on the Right-Hand of the whole Numbers, and Pricks between them, to know them apart; and multiply them together as whole Numbers, and cut off so many Figures to the Right-Hand as there are Decimals in the Multipliee and the Multiplier, which cannot be more than 2, because 100 square Links, is a square Perch. When you have multiplyed the Numbers together, and prick'd off the Decimals, divide the whole Numbers first by 40, which maketh them Quarters, and the remainder Perches; then divide the Quarters by 4, that maketh them Acres, the remainder Quarters.

As for Example, suppose a piece of Land

P.
55 $\frac{1}{2}$ in length

P.
and 27 $\frac{1}{4}$ in
breadth

40)	152		3	4)	A.	Q.	P.
	12		0	38	(9	2	3
					Content		
	36						
	32		3				
	32		2				

556
274
2224
3892
1112
1523,44

Example

Example the 2^d. Suppose a piece of Land

P.		P.
46, ⁷ / ₇ in length,		and 35 in breadth,
	4)	A. Q. P.
40) 163		35
16		
	0 4	2335
		1401
(34)(0)		1634,5

In the last Example there was but one Decimal; there you cut off but one Figure to the Right-Hand: The same for any other Sum.

If you use *Gunter's Chain*, which is four Perch in length, and divided in 100 Links, those Links are about 7 Inches, and 9 tenths of an Inch; you must count your Lines by Chains and Links, and set them down under one another; multiply them together, and cut off 5 Figures to the Right-Hand, and what are left at the Left-Hand, are Acres: Then multiply the five Figures that you cut off by 4, and cut off 5 Figures to the Right-Hand, they to the Left-Hand, are Quarters; then multiply the 5 Figures that you cut off by 40, and cut off 5 Figures to the Right-Hand, and what are left are Perches.

Example

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Chain Links
 Example, a piece of Land—12 35 in length
 and 10,57 in breadth

	8645	that is
	6175	A. Q. P.
	1235	13 0 8
Acres	13 05395	
	4	
Quarter	0 21580	
	40	
Perch	8 63200	

Cutting off 5 Figures is the same as dividing by 100000; so many square Links maketh an Acre. For to put the 2 Sides, or 2 Ends together, and to find the half, set the whole Numbers and Decimal Parts down under one another; pricking between the whole, and the Decimals: Then add them together as whole Numbers, and tenths, and prick between them: To halve them, begin at the Left-Hand, and draw a Line under them: If the first Figure be even, take half of it, and set under the Line; if it be odd, take the least half of it, and set under the Line, and carry the 1 to the next Figure, which is 10 there: If the next Figure be 5, carrying 10 maketh it 15; for the half of it, you must take 7, and set it under the Line,

Line, and carry 10 to the next: If the last Figure be odd, set 5 down by the even half; that is 5 tenths.

Example, one Side is 56 3
the other Side is 47 0

the Sum of them 103 3

the half 51 6 5

Say half 10 is 5, because you cannot take half out of one, set the 5 under the Cypher: Then say half 3 is 1, which set under 3, and carry 10: Say 10 and 3 is 13; the half is 6, which set under the 3 tenths, the odd 1 is but half a tenth, so you may leave that out: But if your Sum be whole Numbers, you must set down 5 tenths, or a $\frac{1}{2}$ by the last Figure: More Examples.

			A.	P.
51 7	59 by Gunter's Chain		15	63
h. 25 8	h. 29 5	the half	7	81

To find how much in breadth maketh an Acre at any length; divide 160 by the length, whatever it be; the Quocient is the Perches, then multiply the remainder by 16,5 the Product after you have cut off the Decimal, divide by the length; and the Quocient is Feet. Then multiply the remainder, if there be any, by 12, and that Product divide by the length, and the Quocient is Inches.

For

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For Example suppose the length 34 Perch.

34) 160 (4 Perch.

136

24

165

660

330

34) 396 (11 Feet

34

56

34

22

12

44

22

34) 264 (7 Inches

238

26

34 $\frac{1}{3}$ of an Inch

That is 4 Perch 11 Feet and 7 Inches, and $\frac{1}{3}$ of an Inch in breadth, makes an Acre at 34 Perch long: The same for any other length.

Figure the 13th hath 9 Angles, it must be laid down in Triangles; there will be 7 Triangles.

Triangles, any Piece that is laid down in Triangles, there will always be as many Triangles within 2, as there is Angles; if there be 4 Angles, there will be 2 Triangles; if there be 5 Angles, there will be 3 Triangles; if there be 6 Angles, there will be 4 Triangles: If there be 7 Angles there will be 5 Triangles. To measure the Piece, first mark all the Angles; next measure all your Offsets: Begin at A, and measure the Offset between A and B, and mark it down: Then measure the Offset between E and F, and mark it down: Then measure from E to C, the Base of the Triangle C D E, and take the Perpendicular to D as you go along, and mark that down: Then measure the Diagonal, from C to F, that will be the Base of 2 Triangles: Then raise 2 Perpendiculars from that Line, on to B, and the other to E: Then cast them up, and mark them down: Then measure a Diagonal Line from T, to A; that Line will be a Base to the 2 Triangles A B T, and A G F. Then raise 2 Perpendiculars from that Line on to B, the other to G; and cast them up, and put them all together and the Field is finished; the black Line from B to F, is only to part the Triangles, which you may do by sticking up some Marks along it; the prick'd Lines shews you every Base, and Perpendicular; how to cast them up, I have shewed you before both by the Table, and the Pen.

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Figure the 14th hath 7 Angles, one Part is measured as a long Square, the other Part is 2 Triangles, as the prick'd Lines direct: Begin with the Square at A, and measure to B, that Hedge is a little crooked; but it is not worth while to make an Offset of it, if it be not a Perch in breadth: But when you go from that Line at B, to allow that Line a little longer, as you may guess at what will make it even; the Line from G to A, allow a little longer: Thus taken in and leaving out, you may make it even; so do at any time when there are such small Crooks inward, or outward: I have put no odd Parts in the Figures, because the Lines should be the easier put together and cast up. When you have gone them once over, you may put odd Parts to them as you please; and what you please.

Figure the 15th and last is a long Square drawn out in square Perches and Quarters; 17 Perches and 4 Quarters in length, and 9 Perches, and 2 Quarters in breadth; which is the Ground-work of all superficial Measure, and of Multiplication, and of the Table of Squares. This Figure shews you why 17 Perches in length, and 9 Perches in breadth, is 153 Perches; there you may tell the Squares, and you will find so many: Or 17 Perches and 3 Quarters in length, and 9 Perches and 2 Quarters in breadth, is 168 square Perches, as you may tell them in the Squares; the whole Squares are 153 Perches

as you told them before: Then tell the Quarters, 2 times 17 is 34 Quarters, and 3 times 9 is 27; that is 27 Quarters, 34 and 27, is 61 Quarters, as you may tell them in the Squares of the Quarters; 4 of them makes a square Perch; that is 15 square Perch and 1 Quarter, which put to 153, is 168 Perch one Quarter, which is the

A. Q. P.

Content of the Piece; I 0 8 $\frac{1}{4}$

17 Perches and 3 Quarters in length, and 9 Perches and 2 Quarters in breadth: So you will find in the Table of Squares and Acres; for this is what all Dimensions are reduced to; that if the Figure were big enough, you might find the Content of any Dimensions in it, by telling the Squares; for as I told you before, this is the Foundation of all flat or superficial Measure, let it be Feet, Yards, Perches, or any other Denomination, the Squares represent them. This Figure tho' it be the last, yet when you have learn'd Notation, and Numeration, you must examine this Figure; it sheweth you the Reason why the length multilpyed by the breadth, gives the Content.



CHAP. V.

THere are Tables for measuring Board and Timber; but I think that the two Foot Rule which I shall describe to you, is

E 2

the

the best for a learner; it is divided into 24 Inches, with each Inch into 8 half Quarters; there are two Tables at each End, with Lines to them for runing Measure, as it is called: One for Boards, the other for Timber; that for Boards, is from one Inch in breadth, to 8 Inches broad, and the length in Feet and Inches set under them at 9 Inches, the Line beginneth that sheweth how much in length maketh a Foot to 36 Inches broad.

The Timber Table and Line beginneth at the other End, at one Inch square, to 9 Inches square, and the length that maketh a Foot, set under them in Feet and Inches; at 10 Inches square the Line beginneth that sheweth how much in length maketh a Foot to 30 Inches square.

The next is *Gunter's* Line, which is sometimes on the back of the Rule; and sometimes on the Side of a flat Rule; they be the truest that are on the Side, as I have observed: It is figured with 1 2 3 4 5 6 7 8 9 10, or 1 2 3 4 5 6 7 8 9 10; and every one of them divided in ten Parts; and between the middle, 1 and 2, those Parts are divided into 5 Parts; and between 2 and 3, those Parts are divided into 2 Parts; and sometimes they are divided so between the first 1 and 2, and between 2 and 3; but not often. When you begin for to number on the Line, you must call the first one 1, and the 2 call 2, and 3 call 3, the 4 call 4, and the 5 call

5 call 5, the 6 call 6, the 7 call 7, the 8 call 8, the 9 call 9; the 1 in the middle call 10, the 2 call 20, the 3 call 30, the 4 call 40, the 5 call 50, the 6 call 60, the 7 call 70, the 8 call 80, the 9 call 90, the 10 call 100; and all the tenth Parts between the last ten Figures call one's: So you will count 100 at once going over, that is 10 to the middle, and ten between all the rest that maketh 100 at once going over the Line: But when your Numbers or Dimensions are large, you must go over the Line again; then you must count the 1 at the beginning 10, and 2 call 20, and 3 call 30, and 4 call 40, and 5 call 50, and 6 call 60, and 7 call 70, and 8 call 80, and 9 call 90, and 10 call 100, and all the 10 Parts call one's; so you count 100 to the middle. When you count forward, you must count all the one's 10, and the 2 tenth Parts between 10 and 20, you must call two's, and all the 5 Parts between 20 and 30, you must call 5, and 20 you must call 200, and 30 you must call 300, and 40 you must call 400, and 50 you must call 500, and 60 you must call 600, and 70 you must call 700, and 80 you must call 800, and 90 you must call 900, and 100 call 1000. Thus I have shewed you how to go twice over the Line, which is far enough for any thing that you will have to do; and as far as any thing can be done any thing near; tho' you may go over again: The first one is 100, the middle 1 is 1000, the end is 10000. To find any whole
Number

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Number on the Line under 100, count 1 in the middle for 10: Suppose it be 12, say 10 and 2 of the one's is 12; to find 9 go back to the first Part of the Line, and the Figure 9 is it. To find 38, call the middle one ten, the 2 call 20, the 3 call 30, and 8 of the ten Numbers between 30 and 40, and that is 38; the same as you were taught before; but if there be any Fractions, as tenth Parts, or quarter Parts; then you must divide the Space between the whole Numbers as near as you can: As suppose 17 $\frac{16}{100}$ from the middle, count 4 one's is 14, and $\frac{3}{4}$ of 2 tenths, and that is it. To find 9 2 look 9 in the first Part of the Line, and 2 of the tenth between 9 and 10, and that is it. If you lack to find any Number above 100, as 160, count 10 in the middle 100, and 6 of the 10 Parts for 60, that is it. It is very plain to find the whole Numbers; for the Parts you must find it between the whole Number as near as you can. For to measure by the Line, you must have a pair of Dividers, or Compasses all things are measured by certain Numbers, call'd Centers; as 12 is the Center for Boards or Timber; if the length be taken in Feet, and the breadth in Inches; or the length be taken in Feet, and the Square in Inches, as the Dimensions are generally taken. Suppose a Board 15 Inches in breadth, and 16 Foot in length; open your Dividers, and set one Foot on 12, and the other on 15, that width; set one Foot on 16, and turn the

the other forward, it will fall on the Content 20 Foot. Suppose a Board 9 Inches broad, and 18 Foot in length; set one Foot of your Dividers on 12 the Center; and the other on 9 that width, set on 18, and turn backward, it will fall on the Content $13\frac{1}{2}$ Foot: If the breadth be more than 12, you must set one the length, and turn forward; but if it be less than 12, you must set on the length, and turn backward. For Timber, or any solid measure, you must set one the length, and turn the Divider twice forward or backward, according as the Square is; if above 12, turn twice forward; if under 12, turn twice backward. Suppose a piece of Timber 10 Inches square, and 28 Foot in length, set your Dividers from 12 to 10, that width; set 1 Foot on 28, and turn them twice backward, and they will fall on the Content $19\frac{1}{2}$ Foot. Suppose a piece of Timber 25 Inches square, and 22 Foot in length; set your Divider from 12 to 25 that width, set one 22 and turn twice forward, and they will fall on 95 Foot the Content. Suppose a piece of Timber 30 Inches square, and 42 Foot in length; set from 12 to 30 that width, set on 42, and turn twice forward and they will fall on the Content; but your Dividers will fall beyond the Line; therefore you must go to the first Part of the Line, and call the first one 10 (as you are directed before to go over the Line twice) and 10 in the middle 100, and [set one 42, on the first Part

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Part of the Line, and turn twice forward and they will fall on the Content 263 the Content of the piece: Board measure doth not often go farther than once over the Line, if it does, you must do the same as before; for Timber only turn but once forward, as you did before. As suppose a Board 34 Inches in breadth, and 48 Foot in length; set your Dividers from 12 to 34, and that width set one 48 on the first Part of the Line, and turn once forward, and they will fall on the Content 135. When you go over the Line the second time, you cannot come within a Foot after 200 Foot, for between 200 and 300, there is but every 5 Foot mark'd; and afterward but every 10 Foot to the end of the Line. Your Dividers must be sharp, that they do not slide on the Line, you must take care to set them true, from Number to Number; and to get as true a Line as you can.

To take the Dimensions of Timber; for round Timber, you must girt it round the middle with a Line, if you measure the piece at once, and double it 4 times; then lay it so double on the Rule, and that length is the Square of the piece. For Oak, or any large Timber that hath the Rinc on, you must allow one Inch in that Square for Rinc; for small Timber half an Inch; to take the Dimensions of square Timber, take two Rules; put one upon one Side of the Piece, and the other on the other, and meet them square;

Square: Then look down the Side of the Piece, and what Number that cuts on the Rule is the Square of the Piece: Take the Square in the middle when you measure the Piece at once, the buyer hath liberty to go nearer the great End, if he can find a less Place, and the buyer hath the liberty to measure the Piece at as many times as he pleases. If a Piece be thicker one way than the other, you must find the middle between the 2 thickneses with your Dividers on the Line, and that is the true Square; some put the thickneses together, and take half for the Square; but that maketh it more than it is. If you have half Feet in the length, or half Inches in the breadth, you must set your Dividers in the middle between the whole Numbers: Thus with practising you may measure any Board, or piece of Timber. Befure learn to read the Numbers on the Line right; then go to measuring; Centers for measuring several Sorts of measure on the Line for Timber and Board; the Dimentions taken in Feet and Inches, the length in Feet; the breadth or Square in Inches, which is the common way of taking, it is 12 the Center, for Yards is 9 the Dimentions taken in Feet. The Center for Squares is 10, the Dimentions taken in Feet: The Center for Land is 160, the Dimensions taken in Perches: Of Circles, the breadth is the Diameter, and the Compass round is the Circumference; when you have one to find the other, set your Di-

viders from 7 to 22, that width set on the Diameter, and turn forwards, they will fall on the Circumference; or if you have the Circumference set on that, and turn them backward, they will fall on the Diameter. To find the Content of a Circle, take half the Diameter for the breadth, and half the Circumference for the length, look in the Table for the Content: The same for any Part of a Circle that the Diameter goes through the Center.

The Table for measuring is divided into five Columns; the first is the length, the second is the square Perches, the third is the Acres, the fourth is the Quarters, the fifth is the odd Perches for the breadth; look on the top of the first Column above the length, there the breadth is set, and in the Sections. Suppose a piece of Land 56 Perch in length, and 37 Perches in breadth; look on the top of the first Column for the breadth 37, and down it for the length 56, and against it in the second Column is the square Perches 2072 in the third 12 A. in the fourth is 3 Q. in the fifth is 32 P. that there is in 56 P. in length, and 37 P. in breadth.
2072 P.

A. Q. P.

12 3 32

The same for any other Dimention; but often there is odd Quarters or halves, which is cast up by the Head: At the end of this Table there is a Table to cast them up. In the Table are five Columns; the first are the Perches in length or breadth; the second is
the

the Number of Perches, that any Number of half Quarters make; the third are the Number of Perches, that any Number of Quarters make; the fourth are the Number of Perches that any Number of halves make; the fifth is the Number of Perches that any Number of three quarters make; they are marked on the top with h Q Q H 3 Q. Suppose the last Piece of Land had been 56 P one H long, and 37 P 3 Q in breadth; when you have found the Content of the whole Perches, as before.

A. Q. P.

12 3 32

then look in the Table of odd Measure in the first Column find 56; in that Line under 3 Q you will find 42 P, look in the first Column for 37, in that Line under H you will find 18 P, which added together is 60 P, which added to, maketh

A. Q. P.

12 3 32

A. Q. P.

13 1 12

Always look in the Table for the breadth; first on the top of the first Column, or in the Section at the parting of the several Figures, because the Table is Triangular, but it answereth to any Number, not above 80 Pearch long, and 40 Perch broad, if more in length. You may first take the length to 80 P and cast that up first, then the Remainder and add them together; as for Example, a piece of Land 107 P in length, and 37 P in breadth; first look in the Table

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for the breadth is 37 P, the length being more than 80 P, first take 80 P for the Length, and 37 P for the Breadth; look in the Table you will find that

A. Q. P.
18 2 0

Then take 27 P the Remainder for the Breadth, and 37 P for the Length, in the Table you will find the Content to be

A. Q. P.
6 0 39

which being added to the other, maketh

A. Q. P.
24 2 39

the Content of the whole Piece. Or if your Piece should be under 80 P long, and above 40 P broad: As suppose it be 75 P long, and 56 P broad; take 40 P first for the Breadth, and 75 P for the Length; look in the Table you will find the Content.

A. Q. P.
18 3 0

Then take 16 P for the Breadth, and 75 P for the Length, look in the Table you will find

A. Q. P.
7 2 0

the Content; which put together, maketh

A. Q. P.
26 1 0

Thus you may measure any Piece of Land by the Table, under 80 P square. If your piece of Land be longer both ways than the Table (which will not often happen) the best way will be to measure it at twice. The
second

Second Column in the Table marked on the Top with Squares is a Table of Multiplication, by which several Things may be measured. As suppose a Piece of Thatch 55 Foot in Length, and 32 Foot in Breadth; look in the Table for the Breadth; and the Length as before directed, and against the Length, look in the Column of Squares you will find 1760 Foot, that is 17 Square and 60 Foot.

Suppose a Piece of Pavement 24 Yards long, and 18½ Yards in Breadth; how many Yards is there in it: Look in the Table for the Breadth, and against the Length is the Content of the whole Numbers 432 Yards. Then for the half of 24 is 12, that maketh it 444 the whole Content. Suppose the Dimentions taken in Feet, you'd have the Content in Yards. As a Piece of Pavement 22 Foot in Breadth, and 32 Foot long, look 22 the Breadth, and against 32 the Length, in the Squares is 704 Feet; then look in the Table for 704 under 9, and the nearest to it is 702, against it in the Column for length is 78 Yards; that 704 Foot is 78 Yards, and 2 Foot for every one in Length is 9 Foot, that is one Yard, that any Number of square Feet under 720, which is 80 Yards, are to be found under 9: But if you have any Number of square Feet above 720, and under 1440, look under 18 the same as you did under 9; that will tell you how many 2 Yards there is in them, which

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which you may by your Head, count how many Yards it is; or look under 2, and against the Number of 2 Yards in the length, in the Squares is the Yards. Suppose it be 64, look in the length for 64, and against it in the Squares is 128, the square Yards in 64, two Yards, which will be as much as you will have occasion for; if it be more, take the Dimentions in Yards, then you will have the Content in Yards at once.

Suppose you were to dig a Cellar 22 Foot in breadth, and 33 Foot in length, and 8 Foot in depth; to know how many solid Yards there is in it, look in the Table for the superficial Feet, you will find 726; then look in the Table of Squares under 27 for 726, or the nearest number to it, which you will find to be 729, and against that in the first Column is the Content in solid Yards 27, that is 27 Solid Yards all but 3 Foot; 27 solid Feet is a solid Yard, all under 27 in breadth are even solid Yards; then look under 8 in breadth, and against 27 in length is 216 Yards, only 3 Foot in every Foot deep must be taken out, which is 24 Foot, the remainder will be 215 Yards and 3 Foot.

I have shewed how to measure Circles but not how to cast them up. Suppose a Circle the Diameter 28 Foot, and the Circumference 88; take half the Diameter 14 or the breadth, and half the Circumference

44 for

44 for the length; and look in the Table, you will find the Content 616 Feet. For any Part of a Circle, take half the Diameter for the breadth, and half that Part of the Circumference for the length, take the shortest for the breadth. Suppose half a Circle the Diameter 28, that Part of the Circumference 44, half 28 is 14 for the breadth; half 44 is 22 for the length; look in the Table you will find the Content 308, the same for any Part of a Circle that the Diameter goes to the Center.

To find how many Shillings there is in 65 Pounds; look in the Table under 20 the breadth, and against 65 the length in the Squares is 1300; the Shillings in 65 Pounds, the same for any Number not above 80 Pounds; if the Number of Pounds be under 20, you must look in the breadth, then for that Number of Pounds, and against 20 in the length is the Shillings required. Suppose 13 Pounds, look under 13 the breadth, and against 20 in the length is 260 the Shillings in 13 Pounds.

To find how many Pence there is in 75 Shillings; look in the Table under 12 the breadth, and against 75 the length in the Squares is 900; the Pence in 75 Shillings the same; for any other Number under 80 Shillings for to find how many half Farthings there is in 67 Shillings, look in the Table under 24 the breadth, and against 67 the length in the Square is 1608, the half Farthings

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things in 67 Shillings, which double, is the Farthings; the same for any Number of Shillings under 80. If the Shillings be under 24 that you want to find the Farthings, you must look under the Number in breadth. As suppose 23 Shillings, look under 23 in breadth, and against 48 in the length, in the Squares is 1104 the Farthings in 23 Shillings. If one Pound of any thing cost 7*d.* what 47 Pound cost at that price; look in the Table under 7 in breadth, and against 47 in length, in the Squares is 329 Pence: Then look in the Squares under 12 for 329, or the nearest Number to it, which is 324, and against that in the length is 27 Shillings; for all under 12 in breadth in the Squares are even Shillings, that is even 12, that in 329 Pence, there is 27*s.* and 5*d.* the same for any other Number of Pence.

If one Pound cost 5*s.* what will 54*l.* cost; look in the Table under 5 in breadth, and against 54 in length, in the Squares is 270 Shillings, that is 13*l.* 10*s.*



LAND MEASURER.

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A Table for Measuring.

2 *squa.* A. Q. P.

2 *squa.* A. Q. P.

2	4	0	0	4
3	6	0	0	6
4	8	0	0	8
5	10	0	0	10
6	12	0	0	12
7	14	0	0	14
8	16	0	0	16
9	18	0	0	18
10	20	0	0	20
11	22	0	0	22
12	24	0	0	24
13	26	0	0	26
14	28	0	0	28
15	30	0	0	30
16	32	0	0	32
17	34	0	0	34
18	36	0	0	36
19	38	0	0	38
20	40	0	1	0
21	42	0	1	2
22	44	0	1	4
23	46	0	1	6
24	48	0	1	8
25	50	0	1	10
26	52	0	1	12
27	54	0	1	14
28	56	0	1	16
29	58	0	1	18
30	60	0	1	20

31	62	0	1	22
32	64	0	1	24
33	66	0	1	26
34	68	0	1	28
35	70	0	1	30
36	72	0	1	32
37	74	0	1	34
38	76	0	1	36
39	78	0	1	38
40	80	0	2	0
41	82	0	2	2
42	84	0	2	4
43	86	0	2	6
44	88	0	2	8
45	90	0	2	10
46	92	0	2	12
47	94	0	2	14
48	96	0	2	16
49	98	0	2	18
50	100	0	2	20
51	102	0	2	22
52	104	0	2	24
53	106	0	2	26
54	108	0	2	28
55	110	0	2	30
56	112	0	2	32
57	114	0	2	34
58	116	0	2	36
59	118	0	2	38

G

2 Squ. A Q. P.

3 Squ. A Q. P.

60	120	0	3	0
61	122	0	3	2
62	124	0	3	4
63	126	0	3	6
64	128	0	3	8
65	130	0	3	10
66	132	0	3	12
67	134	0	3	14
68	136	0	3	16
69	138	0	3	18
70	140	0	3	20
71	142	0	3	22
72	144	0	3	24
73	146	0	3	26
74	148	0	3	28
75	150	0	3	30
76	152	0	3	32
77	154	0	3	34
78	156	0	3	36
79	158	0	3	38
80	160	1	0	0

3 Squares Set the Third

3	9	0	0	9
4	12	0	0	12
5	15	0	0	15
6	18	0	0	18
7	21	0	0	21
8	24	0	0	24
9	27	0	0	27

10	30	0	0	30
11	33	0	0	33
12	36	0	0	36
13	39	0	0	39
14	42	0	1	2
15	45	0	1	5
16	48	0	1	8
17	51	0	1	11
18	54	0	1	14
19	57	0	1	17
20	60	0	1	20
21	63	0	1	23
22	66	0	1	26
23	69	0	1	29
24	72	0	1	32
25	75	0	1	35
26	78	0	1	38
27	81	0	2	1
28	84	0	2	4
29	87	0	2	7
30	90	0	2	10
31	93	0	2	13
32	96	0	2	16
33	99	0	2	19
34	102	0	2	22
35	105	0	2	25
36	108	0	2	28
37	111	0	2	31
38	114	0	2	34
39	117	0	2	37
40	120	0	3	0

3 *squa. A. Q. P.* 3 *squa. A. Q. P.*

41	123	0	3	3
42	126	0	3	6
43	129	0	3	9
44	132	0	3	12
45	135	0	3	15
46	138	0	3	18
47	141	0	3	21
48	144	0	3	24
49	147	0	3	27
50	150	0	3	30
51	153	0	3	33
52	156	0	3	36
53	159	0	3	39
54	162	1	0	2
55	165	1	0	5
56	168	1	0	8
57	171	1	0	11
58	174	1	0	14
59	177	1	0	17
60	180	1	0	20
61	183	1	0	23
62	186	1	0	26
63	189	1	0	29
64	192	1	0	32
65	195	1	0	35
66	198	1	0	38
67	201	1	1	1
68	204	1	1	4
69	207	1	1	7
70	210	1	1	10

71	213	1	1	13
72	216	1	1	16
73	219	1	1	19
74	222	1	1	22
75	225	1	1	25
76	228	1	1	28
77	231	1	1	31
78	234	1	1	34
79	237	1	1	37
80	240	1	2	0

4 *Squa. Sect the Fourth.*

4	16	0	0	16
5	20	0	0	20
6	24	0	0	24
7	28	0	0	28
8	32	0	0	32
9	36	0	0	36
10	40	0	1	0
11	44	0	1	4
12	48	0	1	8
13	52	0	1	12
14	56	0	1	16
15	60	0	1	20
16	64	0	1	24
17	68	0	1	28
18	72	0	1	32
19	76	0	1	36
20	80	0	2	0
21	84	0	2	48

4 *squa.* A. Q. P.4 *squa.* A. Q. P.

22	88	0	2	8
23	92	0	2	12
24	96	0	2	16
25	100	0	2	20
26	104	0	2	24
27	108	0	2	28
28	112	0	2	32
29	116	0	2	36
30	120	0	3	0
31	124	0	3	4
32	128	0	3	8
33	132	0	3	12
34	136	0	3	16
35	140	0	3	20
36	144	0	3	24
37	148	0	3	28
38	152	0	3	32
39	156	0	3	36
40	160	1	0	0
41	164	1	0	4
42	168	1	0	8
43	172	1	0	12
44	176	1	0	16
45	180	1	0	20
46	184	1	0	24
47	188	1	0	28
48	192	1	0	32
49	196	1	0	36
50	200	1	1	0
51	204	1	1	4
52	208	1	1	8

53	212	1	1	12
54	216	1	1	16
55	220	1	1	20
56	224	1	1	24
57	228	1	1	28
58	232	1	1	32
59	236	1	1	36
60	240	1	2	0
61	244	1	2	4
62	248	1	2	8
63	252	1	2	12
64	256	1	2	16
65	260	1	2	20
66	264	1	2	24
67	268	1	2	28
68	272	1	2	32
69	276	1	2	36
70	280	1	3	0
71	284	1	3	4
72	288	1	3	8
73	292	1	3	12
74	296	1	3	16
75	300	1	3	20
76	304	1	3	24
77	308	1	3	28
78	312	1	3	32
79	316	1	3	36
80	320	2	0	0

5 *squa.* *sect the Fifth.*

5	25	0	0	25
6	30	0	0	30

5 *squa.* A. Q. P.

5 *squa.* A. Q. P.

7	35	0	0	35
8	40	0	1	0
9	45	0	1	5
10	50	0	1	10
11	55	0	1	15
12	60	0	1	20
13	65	0	1	25
14	70	0	1	30
15	75	0	1	35
16	80	0	2	0
17	85	0	2	5
18	90	0	2	10
19	95	0	2	15
20	100	0	2	20
21	105	0	2	25
22	110	0	2	30
23	115	2	3	35
24	120	0	3	0
25	125	0	3	5
26	130	0	3	10
27	135	0	3	15
28	140	0	3	20
29	145	0	3	25
30	150	0	3	30
31	155	0	3	35
32	160	1	0	0
33	165	1	0	5
34	170	1	0	10
35	175	1	0	15
36	180	1	0	20
37	185	1	0	25

38	190	1	0	30
39	195	1	0	35
40	200	1	1	0
41	205	1	1	5
42	210	1	1	10
43	215	1	1	15
44	220	1	1	20
45	225	1	1	25
46	230	1	1	30
47	235	1	1	35
48	240	1	2	0
49	245	1	2	5
50	250	1	2	10
51	255	1	2	15
52	260	1	2	20
53	265	1	2	25
54	270	1	2	30
55	275	1	2	35
56	280	1	3	0
57	285	1	3	5
58	290	1	3	10
59	295	1	3	15
60	300	1	3	20
61	305	1	3	25
62	310	1	3	30
63	315	1	3	35
64	320	2	0	0
65	325	2	0	5
66	330	2	0	10
67	335	2	0	15
68	340	2	0	20
69	345	2	0	25

5 *squa. A. Q. P.*6 *squa. A. Q. P.*

70	350	2	0	30
71	355	2	0	35
72	360	2	1	0
73	365	2	1	5
74	370	2	1	10
75	375	2	1	15
76	380	2	1	20
77	385	2	1	25
78	390	2	1	30
79	395	2	1	35
80	400	2	2	0

6 *Squars Set the Sixth.*

6	36	0	0	36
7	42	0	1	2
8	48	0	1	8
9	54	0	1	14
10	60	0	1	20
11	66	0	1	26
12	72	0	1	32
13	78	0	1	38
14	84	0	2	4
15	90	0	2	10
16	96	0	2	16
17	102	0	2	22
18	108	0	2	28
19	114	0	2	34
20	120	0	3	0
21	126	0	3	6
22	132	0	3	12
23	138	0	3	18
24	144	0	3	24
25	150	0	3	30

26	156	0	3	36
27	162	1	0	2
28	168	1	0	8
29	174	1	0	14
30	180	1	0	20
31	186	1	0	26
32	192	1	0	32
33	198	1	0	38
34	204	1	1	4
35	210	1	1	10
36	216	1	1	16
37	222	1	1	22
38	228	1	1	28
39	234	1	1	34
40	240	1	2	0
41	246	1	2	6
42	252	1	2	12
43	258	1	2	18
44	264	1	2	24
45	270	1	2	30
46	276	1	2	36
47	282	1	3	2
48	288	1	3	8
49	294	1	3	14
50	300	1	3	20
51	306	1	3	26
52	312	1	3	32
53	318	1	3	38
54	324	2	0	4
55	330	2	0	10
56	336	2	0	16
57	342	2	0	22
58	348	2	0	28

6 *squa. A. Q. P.*

7 *squa. A. Q. P.*

59	354	2	0	34
60	360	2	1	0
61	366	2	1	6
62	372	2	1	12
63	378	2	1	18
64	384	2	1	24
65	390	2	1	30
66	396	2	1	36
97	402	2	2	2
68	408	2	2	8
69	414	2	2	14
70	420	2	2	20
71	426	2	2	26
72	432	2	2	32
73	438	2	2	38
74	444	2	3	4
75	450	2	3	10
76	456	2	3	16
77	462	2	3	22
78	468	2	3	28
79	474	2	3	34
80	480	3	0	0

7 *Squares Set the Sixth.*

7	49	0	1	9
8	56	0	1	16
9	63	0	1	23
10	70	0	1	30
11	77	0	1	37
12	84	0	2	4
13	91	0	2	11

14	98	0	2	18
15	105	0	2	25
16	112	0	2	32
17	119	0	2	39
18	126	0	3	6
19	133	0	3	13
20	140	0	3	20
21	147	0	3	27
22	154	0	3	34
23	161	1	0	1
24	168	1	0	8
25	175	1	0	15
26	182	1	0	22
27	189	1	0	29
28	196	1	0	36
29	203	1	1	3
30	210	1	1	10
31	217	1	1	17
32	224	1	1	24
33	231	1	1	31
34	238	1	1	38
35	245	1	2	5
36	252	1	2	12
37	259	1	2	19
38	266	1	2	26
39	273	1	2	33
40	280	1	3	0
41	287	1	3	7
42	294	1	3	14

43	301	1	3	21
44	308	1	3	28
45	315	1	3	35
46	322	2	0	2
47	329	2	0	9
48	336	2	0	16
49	343	2	0	23
50	350	2	0	30
51	357	2	0	37
52	364	2	1	4
53	371	2	1	11
54	378	2	1	18
55	385	2	1	25
56	392	2	1	32
57	399	2	1	39
58	406	2	2	6
59	413	2	2	13
60	420	2	2	20
61	427	2	2	27
62	434	2	2	34
63	441	2	3	1
64	448	2	3	8
65	455	2	3	15
66	462	2	3	22
67	469	2	3	29
68	476	2	3	36
69	483	3	0	3
70	490	3	0	10
71	497	3	0	17
72	504	3	0	24

73	511	3	0	31
74	518	3	0	38
75	525	3	1	5
76	532	3	1	12
77	539	3	1	19
78	546	3	1	26
79	553	3	1	30
80	560	3	2	0

8 *squr. Sect the Eighth.*

8	64	0	1	24
9	72	0	1	32
10	80	0	2	0
11	88	0	2	8
12	96	0	2	16
13	104	0	2	24
14	112	0	2	32
15	120	0	3	0
16	128	0	3	8
17	136	0	3	16
18	144	0	3	24
19	152	0	3	32
20	160	1	0	0
21	168	1	0	8
22	176	1	0	16
23	184	1	0	24
24	192	1	0	32
25	200	1	0	0
26	208	1	1	8
27	216	1	1	16

8 sq. A. Q. P.

8 sq. A. Q. P.

28	224	I	I	24
29	232	I	I	32
30	240	I	2	0
31	248	I	2	8
32	256	I	2	16
33	264	I	2	24
34	272	I	2	32
35	280	I	3	0
36	288	I	3	8
37	296	I	3	16
38	304	I	3	24
39	312	I	3	32
40	320	2	0	0
41	328	2	0	8
42	336	2	0	16
43	344	2	0	24
44	352	2	0	32
45	360	2	I	0
46	368	2	I	8
47	376	2	I	16
48	384	2	I	24
49	392	2	I	32
50	400	2	2	0
51	408	2	2	8
52	416	2	2	16
53	424	2	2	24
54	432	2	2	32
55	440	2	3	0
56	448	2	3	8
57	456	2	3	16
58	464	2	3	24

59	472	2	3	32
60	480	3	0	0
61	488	3	0	8
62	496	3	0	16
63	504	3	0	24
64	512	3	0	32
65	520	3	I	0
66	528	3	I	8
67	536	3	I	16
68	544	3	I	24
69	552	3	I	32
70	560	3	2	0
71	568	3	2	8
72	576	3	2	16
73	584	3	2	24
74	592	3	2	32
75	600	3	3	0
76	608	3	3	8
77	616	3	3	16
78	624	3	3	24
79	632	3	3	32
80	640	4	0	0

9 Squares Set the Eighth.

9	81	0	2	I
10	90	0	2	10
11	99	0	2	19
12	108	0	2	28
13	117	0	2	37
14	126	0	3	6
15	135	0	3	15

H

9 *squa. A. Q. P.*9 *squa. A. Q. P.*

16	144	0	3	24
17	153	0	3	33
18	162	1	0	2
19	171	1	0	11
20	180	1	0	20
21	189	1	0	29
22	198	1	0	38
23	207	1	1	7
24	216	1	1	16
25	225	1	1	25
26	234	1	1	34
27	243	1	2	3
28	252	1	2	12
29	261	1	2	21
30	270	1	2	30
31	279	1	2	39
32	288	1	3	8
33	297	1	3	17
34	306	1	3	26
35	315	1	3	35
36	324	2	0	4
37	333	2	0	13
38	342	2	0	22
39	351	2	0	31
40	360	2	1	0
41	369	2	1	9
42	378	2	1	18
43	387	2	1	27
44	396	2	1	36
45	405	2	2	5
46	414	2	2	14

47	423	2	2	23
48	432	2	2	32
49	441	2	3	1
50	450	2	3	10
51	459	2	3	19
52	468	2	3	28
53	477	2	3	37
54	486	3	0	6
55	495	3	0	15
56	504	3	0	24
57	513	3	0	33
58	522	3	1	2
59	531	3	1	11
60	540	3	1	20
61	549	3	1	29
62	558	3	1	38
63	567	3	2	7
64	576	3	2	16
65	585	3	2	25
66	594	3	2	34
67	603	3	3	3
68	612	3	3	12
69	621	3	3	21
70	630	3	3	30
71	639	3	3	39
72	648	4	0	8
73	657	4	0	17
74	666	4	0	26
75	675	4	0	35
76	684	4	1	4
77	693	4	1	13

9 *squa. A. Q. P.* 10 *squa. A. Q. P.*

78	702	4	1 22
79	711	4	1 31
80	720	4	2 0

10 Squares Set the Tenth

10	100	0	2 20
11	110	0	2 30
12	120	0	3 0
13	130	0	3 10
14	140	0	3 20
15	150	0	3 30
16	160	1	0 0
17	170	1	0 10
18	180	1	0 20
19	190	1	0 30
20	200	1	1 0
21	210	1	1 10
22	220	1	1 20
23	230	1	1 30
24	240	1	2 0
25	250	1	2 10
26	260	1	2 20
27	270	1	2 30
28	280	1	3 0
29	290	1	3 10
30	300	1	3 20
31	310	1	3 30
32	320	2	0 0
33	330	2	0 10
34	340	2	0 20

35	350	2	0 30
36	460	2	1 0
37	370	2	1 10
38	380	2	1 20
39	390	2	1 30
40	400	2	2 0
41	410	2	2 10
42	420	2	2 20
43	430	2	2 30
44	440	2	3 0
45	450	2	3 12
46	460	2	3 20
47	470	2	3 30
48	480	3	0 0
49	490	3	0 10
50	500	3	0 20
51	510	3	0 30
52	520	3	1 0
53	530	3	1 10
54	540	3	1 20
55	550	3	1 30
56	560	3	2 0
57	570	3	2 10
58	580	3	2 20
59	590	3	2 30
60	600	3	3 0
61	610	3	3 10
62	620	3	3 20
63	630	3	3 30
64	640	4	0 0
65	650	4	0 10

10 Squ. A Q. P. 11 Squ. A Q. P.

66	660	4	0	20	25	275	1	2	35
67	670	4	0	30	26	286	1	3	6
68	680	4	1	0	27	297	1	3	17
69	690	4	1	10	28	308	1	3	28
70	700	4	1	20	29	319	1	3	39
71	710	4	1	30	30	330	2	0	10
72	720	4	2	0	31	341	2	0	21
73	730	4	2	10	32	352	2	0	32
74	740	4	2	20	33	363	2	1	3
75	750	4	2	30	34	374	2	1	14
76	760	4	3	0	35	385	2	1	25
77	770	4	3	10	36	396	2	1	36
78	780	4	3	20	37	407	2	2	7
79	790	4	3	30	38	418	2	2	18
80	800	5	0	0	39	429	2	2	29
					40	440	2	3	0
					41	451	2	3	11
					42	462	2	3	22
					43	473	2	3	33
					44	484	3	0	4
					45	495	3	0	15
					46	506	3	0	26
					47	517	3	0	37
					48	528	3	1	8
					49	539	3	1	19
					50	550	3	1	30
					51	561	3	2	1
					52	572	3	2	12
					53	583	3	2	23
					54	594	3	2	34
					55	605	3	3	5

11 Squares Set the 11th.

11	121	0	3	1
12	132	0	3	12
13	143	0	3	23
14	154	0	3	34
15	165	1	0	5
16	176	1	0	16
17	187	1	0	27
18	198	1	0	38
19	209	1	1	9
20	220	1	1	20
21	231	1	1	31
22	242	1	2	2
23	253	1	2	13
24	264	1	2	24

11 *squa. A. Q. P.*

12 *squa. A. Q. P.*

56	616	3	3	16
57	627	3	3	27
58	638	3	3	38
59	649	4	0	9
60	660	4	0	20
61	671	4	0	31
62	682	4	1	2
63	693	4	1	13
64	704	4	1	24
65	715	4	1	35
66	726	4	2	6

67 | 737 | 4 | 2 | 17

68	748	4	2	28
69	759	4	2	39
70	770	4	3	10
71	781	4	3	21
72	792	4	3	32
73	803	5	0	3
74	814	5	0	14
75	825	5	0	25
76	836	5	0	36
77	847	5	1	7
78	858	5	1	18
79	869	5	1	29
80	880	5	2	0

12 Squares Set the 12th.

12	144	0	3	24
13	156	0	3	36
14	168	1	0	8

15	180	1	0	20
16	192	1	0	32
17	204	1	1	4
18	216	1	1	16
19	228	1	1	28
20	240	1	2	0
21	252	1	2	12
22	264	1	2	24
23	276	1	2	36
24	288	1	3	8
25	300	1	3	20
26	312	1	3	32
27	324	2	0	4
28	336	2	0	16
29	348	2	0	28
30	360	2	1	0
31	372	2	1	12
32	384	2	1	24
33	396	2	1	36
34	408	2	2	8
35	420	2	2	20
36	432	2	2	32
37	444	2	3	4
38	456	2	3	16
39	468	2	3	28
40	480	3	0	0
41	492	3	0	12
42	504	3	0	24
43	516	3	0	36
44	528	3	1	8
45	540	3	1	20

12 *squ. A. Q. P.* 12 *squ. A. Q. P.*

46	552	3	1	32
47	564	3	2	4
48	576	3	2	16
49	588	3	2	28
50	600	3	3	0
51	612	3	3	12
52	624	3	3	24
53	636	3	3	36
54	648	4	0	8
55	660	4	0	20
56	672	4	0	32
57	684	4	1	4
58	696	4	1	16
59	708	4	1	28
60	720	4	2	0
61	732	4	2	12
62	744	4	2	24
63	756	4	2	36
64	768	4	3	8
65	780	4	3	20
66	792	4	3	32
67	804	5	0	4
68	816	5	0	16
69	828	5	0	28
70	840	5	1	0
71	852	5	1	12
72	864	5	1	24
73	876	5	1	36
74	888	5	2	8
75	900	5	2	20
76	912	5	2	32

77	924	5	3	4
78	936	5	3	16
79	948	5	3	28
80	960	6	0	0

13 *Squares Set the 13th.*

13	169	1	0	9
14	182	1	0	22
15	195	1	0	35
16	208	1	1	8
17	221	1	1	21
18	234	1	1	34
19	247	1	2	7
20	260	1	2	20
21	273	1	2	33
22	286	1	3	6
23	299	1	3	19
24	312	1	3	32
25	325	2	0	5
26	338	2	0	18
27	351	2	0	31
28	364	2	1	4
29	377	2	1	17
30	390	2	1	30
31	403	2	2	3
32	416	2	2	16
33	429	2	2	29
34	442	2	3	2
35	455	2	3	15
36	468	2	3	28
37	481	3	0	1

13 *squa. A. Q. P.*

13 *squa. A. Q. P.*

38	494	3	0	14
39	507	3	0	27
40	520	3	1	0
41	533	3	1	13
42	546	3	1	26
43	559	3	1	39
44	572	3	2	12
45	585	3	2	25
46	598	3	2	38
47	611	3	3	11
48	624	3	3	24
49	637	3	3	37
50	650	4	0	10
51	663	4	0	23
52	676	4	0	36
53	689	4	1	9
54	702	4	1	22
55	715	4	1	35
56	728	4	2	8
57	741	4	2	21
58	754	4	2	34
59	767	4	3	7
60	780	4	3	20
61	793	4	3	33
62	806	5	0	6
63	819	5	0	19
64	832	5	0	32
65	845	5	1	5
66	858	5	1	18
67	871	5	1	31
68	884	5	2	4

69	897	5	2	17
70	910	5	2	30
71	923	5	3	3
72	936	5	3	16
73	949	5	3	29
74	962	6	0	2
75	975	6	0	15
76	988	6	0	28
77	1001	6	1	1
78	1014	6	1	14
79	1027	6	1	27
80	1040	6	2	0

14 Squares Set the 14th.

14	196	1	0	36
15	210	1	1	10
16	224	1	1	24
17	238	1	1	38
18	252	1	2	12
19	266	1	2	26
20	280	1	3	0
21	294	1	3	14
22	308	1	3	28
23	322	2	0	2
24	336	2	0	16
25	350	2	0	30
26	364	2	1	4
27	378	2	1	18
28	392	2	1	32
29	406	2	2	6

14 *squa.* A. Q. P.14 *squa.* A. Q. P.

30	420	2	2	20
31	434	2	2	34
32	448	2	3	8
33	462	2	3	22
34	476	2	3	36
35	490	3	0	10
36	504	3	0	24
37	518	3	0	38
38	532	3	1	12
39	546	3	1	26
40	560	3	2	0
41	574	3	2	14
42	588	3	2	28
43	602	3	3	2
44	616	3	3	16
45	630	3	3	30
46	644	4	0	4
47	658	4	0	18
48	672	4	0	32
49	686	4	1	6
50	700	4	1	20
51	714	4	1	34
52	728	4	2	8
53	742	4	2	22
54	756	4	2	36
55	770	4	3	10
56	784	4	3	24
57	798	4	3	38
58	812	5	0	12
59	826	5	0	26
60	840	5	1	0

61	854	5	1	14
62	868	5	1	28
63	882	5	2	2
64	896	5	2	16
65	910	5	2	30
66	924	5	3	4
67	938	5	3	18
68	952	5	3	32
69	966	6	0	6
70	980	6	0	20
71	994	6	0	34
72	1008	6	1	8
73	1022	6	1	22
74	1036	6	1	36
75	1050	6	2	10
76	1064	6	2	24
77	1078	6	2	38
78	1092	6	3	2
79	1106	6	3	26
80	1120	7	0	0

15 Squares Set the 15th

15	225	1	1	25
16	240	1	2	0
17	255	1	2	15
18	270	1	2	35
19	285	1	3	0
20	300	1	3	20
21	315	1	3	35
22	330	2	0	10
23	345	2	0	25
24	360	2	1	0
25	375	2	1	15
26	390	2	1	30

15 sq. A. Q. P. 15 sq. A. Q. P.

27	405	2	2	5	58	870	5	1	30
28	420	2	2	20	59	885	5	2	5
29	435	2	2	35	60	900	5	2	20
30	450	2	3	10	61	915	5	2	35
31	465	2	3	25	62	930	5	3	10
32	480	3	0	0	63	945	5	3	25
33	495	3	0	15	64	960	6	0	0
34	510	3	0	30	65	975	6	0	15
35	525	3	1	5	66	990	6	0	30
36	540	3	1	20	67	1005	6	1	5
37	555	3	1	35	68	1020	6	1	20
38	570	3	2	10	69	1035	6	1	35
39	585	3	2	25	70	1050	6	2	10
40	600	3	3	0	71	1065	6	2	25
41	615	3	3	15	72	1080	6	3	0
42	630	3	3	30	73	1095	6	3	15
43	645	4	0	5	74	1110	6	3	30
44	660	4	0	20	75	1125	7	0	5
45	675	4	0	35	76	1140	7	0	20
46	690	4	1	10	77	1155	7	0	35
47	705	4	1	25	78	1170	7	1	10
48	720	4	2	0	79	1185	7	1	25
49	735	4	2	15	80	1200	7	2	0
50	750	4	2	30	16 Squares See the 16th.				
51	765	4	3	5	16	256	1	2	16
52	780	4	3	20	17	272	1	2	32
53	795	4	3	35	18	288	1	3	8
54	810	5	0	10	19	304	1	3	24
55	825	5	0	25	20	320	2	0	0
56	840	5	1	0	21	336	2	0	16
57	855	5	1	15					

16 Squ. A Q. P. 16 Squ. A Q. P.

22	352	2	0	32	53	848	5	1	8
23	368	2	1	8	54	864	5	1	24
24	384	2	1	24	55	880	5	2	0
25	400	2	2	0	56	896	5	2	16
26	416	2	2	16	57	912	5	2	32
27	432	2	2	32	58	928	5	3	8
28	448	2	3	8	59	944	5	3	24
29	464	2	3	24	60	960	6	0	0
30	480	3	0	0	61	976	6	0	16
31	496	3	0	16	62	992	6	0	32
32	512	3	0	32	63	1008	6	1	8
33	528	3	1	8	64	1024	6	1	24
34	544	3	1	24	65	1040	6	2	0
35	560	3	2	0	66	1056	6	2	16
36	576	3	2	16	67	1072	6	2	32
37	592	3	2	32	68	1088	6	3	8
38	608	3	3	8	69	1104	6	3	24
39	624	3	3	24	70	1120	7	0	0
40	640	4	0	0	71	1136	7	0	16
41	656	4	0	16	72	1152	7	0	32
42	672	4	0	32	73	1168	7	1	8
43	688	4	1	8	74	1184	7	1	24
44	704	4	1	24	75	1200	7	2	0
45	720	4	2	0	76	1216	7	2	16
46	736	4	2	16	77	1232	7	2	32
47	752	4	2	32	78	1248	7	3	8
48	768	4	3	8	79	1264	7	3	24
49	784	4	3	24	80	1280	8	0	0
50	800	5	0	0	17 Squares Set the 17th.				
51	816	5	0	16	17 289 113 9				
52	832	5	0	32					

17 *squa. A. Q. P.* 17 *squa. A. Q. P.*

18	306	1	3	26	49	833	5	0	33
19	323	2	0	3	50	850	5	1	10
20	340	2	0	20	51	867	5	1	27
21	357	2	0	37	52	884	5	2	4
22	374	2	1	14	53	901	5	2	21
23	391	2	1	31	54	918	5	2	38
24	408	2	2	8	55	935	5	3	15
25	425	2	2	25	56	952	5	3	32
26	442	2	3	2	57	969	6	0	9
27	459	2	3	19	58	986	6	0	26
28	476	2	3	36	59	1003	6	1	3
29	493	3	0	13	60	1020	6	1	0
30	510	3	0	30	61	1037	6	1	37
31	527	3	1	7	62	1054	6	2	14
32	544	3	1	24	63	1071	6	2	31
33	561	3	2	1	64	1088	6	3	8
34	578	3	2	18	65	1105	6	3	25
35	595	3	2	35	66	1122	7	0	2
36	612	3	3	12	67	1139	7	0	19
37	629	3	3	29	68	1156	7	0	36
38	646	4	0	6	69	1173	7	1	13
39	663	4	0	23	70	1190	7	1	0
40	680	4	1	0	71	1207	7	2	7
41	697	4	1	17	72	1224	7	2	24
42	714	4	1	34	73	1241	7	3	1
43	731	4	2	11	74	1258	7	3	18
44	748	4	2	28	75	1275	7	3	35
45	765	4	3	5	76	1292	8	0	12
46	782	4	3	22	77	1309	8	0	29
47	799	4	3	39	78	1326	8	1	6
48	816	5	0	16	79	1343	8	1	23

18 *sq. A. Q. P.* 18 *sq. A. Q. P.*

80 1360 8 2 0

18 *Squares Sect the 18th.*

18	324	2	0	4
19	342	2	0	22
20	360	2	1	0
21	378	2	1	18
22	396	2	1	36
23	414	2	2	14
24	432	2	2	32
25	450	2	3	10
26	468	2	3	28
27	486	3	0	6
28	504	3	0	24
29	522	3	1	2
30	540	3	1	20
31	558	3	1	38
32	576	3	2	16
33	594	3	2	34
34	612	3	3	12
35	630	3	3	30
36	648	4	0	8
37	666	4	0	26
38	684	4	1	4
39	702	4	1	22
40	720	4	2	0
41	738	4	2	18
42	756	4	2	36
43	774	4	3	14
44	792	4	3	32

45	810	5	0	10
46	828	5	0	28
47	846	5	1	6
48	864	5	1	24
49	882	5	2	2
50	900	5	2	20
51	918	5	2	38
52	936	5	3	16
53	954	5	3	34
54	972	6	0	12
55	990	6	0	30
56	1008	6	1	8
57	1026	6	1	26
58	1044	6	2	4
59	1062	6	2	22
60	1080	6	3	0
61	1098	6	3	18
62	1116	6	3	36
63	1134	7	0	14
64	1152	7	0	32
65	1170	7	1	10
66	1188	7	1	28
67	1206	7	2	6
68	1224	7	2	24
69	1242	7	3	2
70	1260	7	3	20
71	1278	7	3	38
72	1296	8	0	16
73	1314	8	0	34
74	1332	8	1	12

18 *squa. A. Q. P.* 19 *squa. A. Q. P.*

75	1350	8	1	30
76	1368	8	2	8
77	1386	8	2	26
78	1404	8	3	4
79	1422	8	3	22
80	1440	9	0	0

19 *Squares Sect the 19th.*

19	361	2	1	1
20	380	2	1	20
21	399	2	1	39
22	418	2	2	18
23	437	2	2	37
24	456	2	3	16
25	475	2	3	35
26	494	3	0	14
27	513	3	0	33
28	532	3	1	12
29	551	3	1	31
30	570	3	2	10
31	589	3	2	29
32	608	3	3	8
33	627	3	3	27
34	646	4	0	6
35	665	4	0	25
36	684	4	1	4
37	703	4	1	23
38	722	4	2	2
39	741	4	2	21
40	760	4	3	0
41	779	4	3	19

42	798	4	3	38
43	817	5	0	17
44	836	5	0	36
45	855	5	1	15
46	874	5	1	34
47	893	5	2	13
48	912	5	2	32
49	931	5	3	11
50	950	5	3	30
51	969	6	0	9
52	988	6	0	28
53	1007	6	1	7
54	1026	6	1	26
55	1045	6	2	5
56	1064	6	2	24
57	1083	6	3	3
58	1102	6	3	22
59	1121	7	0	1
60	1140	7	0	20
61	1159	7	0	39
62	1178	7	1	18
63	1197	7	1	37
64	1216	7	2	16
65	1235	7	2	35
66	1254	7	3	14
67	1273	7	3	33
68	1292	8	0	12
69	1311	8	0	31
70	1330	8	1	10
71	1349	8	1	29
72	1368	8	2	8

19 *squa. A. Q. P.* 20 *squa. A. Q. P.*

73	1387	8	2	27
74	1406	8	3	6
75	1425	8	3	25
76	1444	9	0	4
77	1463	9	0	23
78	1482	9	1	2
79	1501	9	1	21
80	1520	9	2	0

20 *Squares Set the 20th.*

20	400	2	2	0
21	420	2	2	20
22	440	2	3	0
23	460	2	3	20
24	480	3	0	0
25	500	3	0	20
26	520	3	1	0
27	540	3	1	20
28	560	3	2	0
29	580	3	2	20
30	600	3	3	0
31	620	3	3	20
32	640	4	0	0
33	660	4	0	20
34	680	4	1	0
35	700	4	1	20
36	720	4	2	0
37	740	4	2	20
38	760	4	3	0
39	780	4	3	20
40	800	5	0	0

41	820	5	0	20
42	840	5	1	0
43	860	5	1	20
44	880	5	2	0
45	900	5	2	20
46	920	5	3	0
47	940	5	3	20
48	960	6	0	0
49	980	6	0	20
50	1000	6	1	0
51	1020	6	1	20
52	1040	6	2	0
53	1060	6	2	20
54	1080	6	3	0
55	1100	6	3	20
56	1120	7	0	0
57	1140	7	0	20
58	1160	7	1	0
59	1180	7	1	20
60	1200	7	2	0
61	1220	7	2	20
62	1240	7	3	0
63	1260	7	3	20
64	1280	8	0	0
65	1300	8	0	20
66	1320	8	1	0
67	1340	8	1	20
68	1360	8	2	0
69	1380	8	2	20
70	1400	8	3	0
71	1420	8	3	20

20 *squa. A. Q. P.* 21 *squa. A. Q. P.*

72	1440	9	0	0	41	861	5	1	21
73	1460	9	0	20	42	882	5	2	2
74	1480	9	1	0	43	903	5	2	23
75	1500	9	1	20	44	924	5	3	4
76	1520	9	2	0	45	945	5	3	25
77	1540	9	2	20	46	966	6	0	6
78	1560	9	3	0	47	987	6	0	27
79	1580	9	3	20	48	1008	6	1	8
80	1600	10	0	0	49	1029	6	1	29

21 *Squares Set the 21 ft.*

21	441	2	3	1	50	1050	6	2	10
22	462	2	3	22	51	1071	6	2	31
23	483	3	0	3	52	1092	6	3	12
24	504	3	0	24	53	1113	6	3	33
25	525	3	1	5	54	1134	7	0	14
26	546	3	1	26	55	1155	7	0	35
27	567	3	2	7	56	1176	7	1	16
28	588	3	2	28	57	1197	7	1	37
29	609	3	3	9	58	1218	7	2	18
30	630	3	3	30	59	1239	7	2	39
31	651	4	0	11	60	1260	7	3	20
32	672	4	0	32	61	1281	8	0	1
33	693	4	1	13	62	1302	8	0	22
34	714	4	1	34	63	1323	8	1	3
35	735	4	2	15	64	1344	8	1	24
36	756	4	2	36	65	1365	8	2	5
37	777	4	3	17	66	1386	8	2	26
38	798	4	3	38	67	1407	8	3	7
39	819	5	0	19	68	1428	8	3	28
40	840	5	1	0	69	1449	9	0	9
					70	1470	9	0	30
					71	1491	9	1	11

21 *Squa. A. Q. P.*22 *Squa. A. Q. P.*

72	1512	9	1	32
73	1533	9	2	13
74	1554	9	2	34
75	1575	9	3	15
76	1596	9	3	36
77	1617	10	0	17
78	1638	10	0	38
79	1659	10	1	19
80	1680	10	2	0

22 *Squares Set the 22d.*

22	484	3	0	4
23	506	3	0	26
24	528	3	1	8
25	550	3	1	30
26	572	3	2	12
27	594	3	2	34
28	616	3	3	16
29	638	3	3	38
30	660	4	0	20
31	682	4	1	2
32	704	4	1	24
33	726	4	2	6
34	748	4	2	28
35	770	4	3	10
36	792	4	3	32
37	814	5	0	14
38	836	5	0	36
39	858	5	1	18
40	880	5	2	0
41	902	5	2	22

42	924	5	3	4
43	946	5	3	26
44	968	6	0	8
45	990	6	0	30
46	1012	6	1	12
47	1034	6	1	34
48	1056	6	2	16
49	1078	6	2	38
50	1100	6	3	20
51	1122	7	0	2
52	1144	7	0	24
53	1166	7	1	6
54	1188	7	1	28
55	1210	7	2	10
56	1232	7	2	32
57	1254	7	3	14
58	1276	7	3	36
59	1298	8	0	18
60	1320	8	1	0
61	1342	8	1	22
62	1364	8	2	4
63	1386	8	2	26
64	1408	8	3	8
65	1430	8	3	30
66	1452	9	0	12
67	1474	9	0	34
68	1496	9	1	16
69	1518	9	1	38
70	1540	9	2	20
71	1562	9	3	2
72	1584	9	3	24
73	1606	10	0	6
74	1628	10	0	28
75	1650	10	1	10

22 sq. A. Q. P. 23 sq. A. Q. P.

76	1672	10	1	32
77	1694	10	2	14
78	1716	10	2	36
79	1738	10	3	18
80	1760	11	0	0

23 Squares Set the 23d.

23	529	3	1	9
24	552	3	1	32
25	575	3	2	15
26	598	3	2	38
27	621	3	3	21
28	644	4	0	4
29	667	4	0	27
30	690	4	1	10
31	713	4	1	33
32	736	4	2	16
33	759	4	2	39
34	782	4	3	22
35	805	5	0	5
36	828	5	0	28
37	851	5	1	11
38	874	5	1	34
39	897	5	2	17
40	920	5	3	0
41	943	5	3	23
42	966	6	0	6
43	989	6	0	29
44	1012	6	1	12
45	1035	6	1	35
46	1058	6	2	18

47	1081	6	3	1
48	1104	6	3	24
49	1127	7	0	7
50	1150	7	0	30
51	1173	7	1	13
52	1196	7	1	36
53	1219	7	2	19
54	1242	7	3	2
55	1265	7	3	25
56	1288	8	0	8
57	1311	8	0	31
58	1334	8	1	14
59	1357	8	1	37
60	1380	8	2	20
61	1403	8	3	3
62	1426	8	3	26
63	1449	9	0	9
64	1472	9	0	32
65	1495	9	1	15
66	1518	9	1	38
67	1541	9	2	21
68	1564	9	3	4
69	1587	9	3	27
70	1610	10	0	10
71	1633	10	0	33
72	1656	10	1	16
73	1679	10	1	39
74	1702	10	2	22
75	1725	10	3	5
76	1748	10	3	28
77	1771	11	0	11

23 *squa. A. Q. P.***24** *squa. A. Q. P.*

78	1794	11	0	34
79	1817	11	1	17
80	1840	11	2	0

24 Squares Set the 24th.

24	576	3	2	16
25	600	3	3	0
26	624	3	3	24
27	648	4	0	8
28	672	4	0	32
29	696	4	1	16
30	720	4	2	0
31	744	4	2	24
32	768	4	3	8
33	792	4	3	32
34	816	5	0	16
35	840	5	1	0
36	864	5	1	24
37	888	5	1	8
38	912	5	2	32
39	936	5	3	16
40	960	6	0	0
41	984	6	0	24
42	1008	6	1	8
43	1032	6	1	32
44	1056	6	2	16
45	1080	6	3	
46	1104	6	3	24
47	1128	7	0	8
48	1152	7	0	32
49	1176	7	1	16

50	1200	7	2	0
51	1224	7	2	24
52	1248	7	3	8
53	1272	7	3	32
54	1296	8	0	16
55	1320	8	1	0
56	1344	8	1	24
57	1368	8	2	8
58	1392	8	2	32
59	1416	8	3	16
60	1440	9	0	0
61	1464	9	0	24
62	1488	9	1	8
63	1512	9	1	32
64	1536	9	2	16
65	1560	9	3	0
66	1584	9	3	24
67	1608	10	0	8
68	1632	10	0	32
69	1656	10	1	16
70	1680	10	2	0
71	1704	10	2	24
72	1728	10	3	8
73	1752	10	3	32
74	1776	11	0	16
75	1800	11	1	0
76	1824	11	1	24
77	1848	11	2	8
78	1872	11	2	32
79	1896	11	3	16
80	1920	12	0	0

25 *squa. A. Q. P.* 25 *squa. A. Q. P.*

25 Squares Set the 25th.

25	625	3	3	25
26	650	4	0	10
27	675	4	0	35
28	700	4	1	20
29	725	4	2	5
30	750	4	2	30
31	775	4	3	15
32	800	5	0	0
33	825	5	0	25
34	850	5	1	10
35	875	5	1	35
36	900	5	2	20
37	925	5	3	5
38	950	5	3	30
39	975	6	0	15
40	1000	6	1	0
41	1025	6	1	25
42	1050	6	2	10
43	1075	6	2	35
44	1100	6	3	20
45	1125	7	0	5
46	1150	7	0	30
47	1175	7	1	15
48	1200	7	2	0
49	1225	7	2	25
50	1250	7	3	10
51	1275	7	3	35
52	1300	8	0	20
53	1325	8	1	5
54	1350	8	1	30

55	1375	8	2	15
56	1400	8	3	0
57	1425	8	3	25
58	1450	9	0	10
59	1475	9	0	35
60	1500	9	1	20
61	1525	9	2	5
62	1550	9	2	30
63	1575	9	3	15
64	1600	10	0	0
65	1625	10	0	25
66	1650	10	1	10
67	1675	10	1	35
68	1700	10	2	20
69	1725	10	3	5
70	1750	10	3	30
71	1775	11	0	15
72	1800	11	1	0
73	1825	11	1	25
74	1850	11	2	10
75	1875	11	2	35
76	1900	11	3	20
77	1925	12	0	5
78	1950	12	0	30
79	1975	12	1	15
80	2000	12	2	0

26 Squares Set the 26th.

26	676	4	0	36
27	702	4	1	22
28	728	4	2	8
29	754	4	2	34

26 *squa. A. Q. P.* 26 *squa. A. Q. P.*

30	780	4	3	20
31	806	5	0	6
32	832	5	0	32
33	858	5	1	18
34	884	5	2	4
35	910	5	2	30
36	936	5	3	16
37	962	6	0	2
38	988	6	0	28
39	1014	6	1	14
40	1040	6	2	0
41	1066	6	2	26
42	1092	6	3	12
43	1118	6	3	38
44	1144	7	0	24
45	1170	7	1	10
46	1196	7	1	36
47	1222	7	2	22
48	1248	7	3	8
49	1274	7	3	34
50	1300	8	0	20
51	1326	8	1	6
52	1352	8	1	32
53	1378	8	2	18
54	1404	8	3	4
55	1430	8	3	30
56	1456	9	0	16
57	1482	9	1	2
58	1508	9	1	28
59	1534	9	2	14
60	1560	9	3	0

61	1586	9	3	26
62	1612	10	0	12
63	1638	10	0	38
64	1664	10	1	24
65	1690	10	2	10
66	1716	10	2	36
67	1742	10	3	22
68	1768	11	0	8
69	1794	11	0	34
70	1820	11	1	20
71	1846	11	2	6
72	1872	11	2	32
73	1898	11	3	18
74	1924	12	0	4
75	1950	12	0	30
76	1976	12	1	16
77	2002	12	2	2
78	2028	12	2	28
79	2054	12	3	14
80	2080	13	0	0

27 Squares Set the 27th.

27	729	4	2	9
28	756	4	2	36
29	783	4	3	23
30	810	5	0	10
31	837	5	0	37
32	864	5	1	24
33	891	5	2	11
34	918	5	2	38
35	945	5	3	25

27 *squa. A. Q. P.*

27 *squa. A. Q. P.*

36	972	6	0	12
37	999	6	0	39
38	1026	6	1	26
39	1053	6	2	13
40	1080	6	3	0
41	1107	6	3	27
42	1134	7	0	14
43	1161	7	1	1
44	1188	7	1	28
45	1215	7	2	15
46	1242	7	3	2
47	1269	7	3	29
48	1296	8	0	16
49	1323	8	1	3
50	1350	8	1	30
51	1377	8	2	17
52	1404	8	3	4
53	1431	8	3	31
54	1458	9	0	18
55	1485	9	1	5
56	1512	9	1	32
57	1539	9	2	19
58	1566	9	3	6
59	1593	9	3	33
60	1620	10	0	20
61	1647	10	1	7
62	1674	10	1	34
63	1701	10	2	21
64	1728	10	3	8
65	1755	10	3	35
66	1782	11	0	22

67	1809	11	1	9
68	1836	11	1	36
69	1863	11	2	23
70	1890	11	3	10
71	1917	11	3	37
72	1944	12	0	24
73	1971	12	1	11
74	1998	12	1	38
75	2025	12	2	25
76	2052	12	3	12
77	2079	12	3	39
78	2106	13	0	26
79	2133	13	1	13
80	2160	13	2	0

28 *Squares See the 28th.*

28	784	4	3	24
29	812	5	0	12
30	840	5	1	0
31	864	5	1	28
32	896	5	2	16
33	924	5	3	4
34	952	5	3	32
35	980	6	0	20
36	1008	6	1	8
37	1036	6	1	36
38	1064	6	2	24
39	1092	6	3	12
40	1120	7	0	0
41	1148	7	0	28
42	1176	7	1	16

28 *squa.* A. Q. P.28 *squa.* A. Q. P.

43	1204	7	2	4
44	1232	7	2	32
45	1260	7	3	20
46	1288	8	0	8
47	1316	8	0	36
48	1344	8	1	24
49	1372	8	2	12
50	1400	8	3	0
51	1428	8	3	28
52	1456	9	0	16
53	1484	9	1	4
54	1512	9	1	32
55	1540	9	2	20
56	1568	9	3	8
57	1596	9	3	36
58	1624	10	0	24
59	1652	10	1	12
60	1680	10	2	0
61	1708	10	2	28
62	1736	10	3	16
63	1764	11	0	4
64	1792	11	0	32
65	1820	11	1	20
66	1848	11	2	8
67	1876	11	2	36
68	1904	11	3	24
69	1932	12	0	12
70	1960	12	1	0
71	1988	12	1	28
72	2016	12	2	16
73	2044	12	3	4

74	2072	12	3	32
75	2100	13	0	20
76	2128	13	1	8
77	2156	13	1	36
78	2184	13	2	24
79	2212	13	3	12
80	2240	14	0	0

29 *Squares* See the 29th.

29	841	5	1	1
30	870	5	1	30
31	899	5	2	19
32	928	5	3	8
33	957	5	3	37
34	986	6	0	26
35	1015	6	1	15
36	1044	6	2	4
37	1073	6	2	33
38	1102	6	3	22
39	1131	7	0	11
40	1160	7	1	0
41	1189	7	1	29
42	1218	7	2	18
43	1247	7	3	7
44	1276	7	3	36
45	1305	8	0	25
46	1334	8	1	14
47	1363	8	2	3
48	1392	8	2	32
49	1421	8	3	21
50	1450	9	0	10

29 *squa. A. Q. P.* 30 *squa. A. Q. P.*

51	1479	9	0	39
52	1508	9	1	28
53	1537	9	2	17
54	1566	9	3	6
55	1595	9	3	35
56	1624	10	0	24
57	1653	10	1	13
58	1682	10	2	2
59	1711	10	2	31
60	1740	10	3	20
61	1769	11	0	9
62	1798	11	0	38
63	1827	11	1	27
64	1856	11	2	16
65	1885	11	3	5
66	1914	11	3	34
67	1943	12	0	23
68	1972	12	1	12
69	2001	12	2	1
70	2030	12	2	30
71	2059	12	3	19
72	2088	13	0	8
73	2117	13	0	37
74	2146	13	1	26
75	2175	13	2	15
76	2204	13	3	4
77	2233	13	3	33
78	2262	14	0	22
79	2291	14	1	11
80	2320	14	2	0

30 Squares. See the 30th.

30	900	5	2	20
31	930	5	3	10
32	960	6	0	0
33	990	6	0	30
34	1020	6	1	20
35	1050	6	2	10
36	1080	6	3	0
37	1110	6	3	30
38	1140	7	0	20
39	1170	7	1	10
40	1200	7	2	0
41	1230	7	2	30
42	1260	7	3	20
43	1290	8	0	10
44	1320	8	1	0
45	1350	8	1	30
46	1383	8	2	20
47	1410	8	3	10
48	1440	9	0	0
49	1470	9	0	30
50	1500	9	1	20
51	1530	9	2	10
52	1560	9	3	0
53	1590	9	3	30
54	1620	10	0	20
55	1650	10	1	10
56	1680	10	2	0
57	1710	10	2	30
58	1740	10	3	20
59	1770	11	0	10
60	1800	11	1	0

30 *squ. A. Q. P.* 31 *squ. A. Q. P.*

61	1830	11	1	30
62	1860	11	2	20
63	1890	11	3	10
64	1920	12	0	0
65	1950	12	0	30
66	1980	12	1	20
67	2010	12	2	0
68	2040	11	3	0
69	2070	12	3	30
70	2100	13	0	20
71	2130	13	1	10
72	2160	13	2	0
73	2190	13	2	30
74	2220	13	3	20
75	2250	14	0	10
76	2280	14	1	0
77	2310	14	1	30
78	2340	14	2	20
79	2370	14	3	10
80	2400	15	0	0

31 *Squares Set the 21st.*

31	961	6	0	1
32	992	6	0	32
33	1023	6	1	23
34	1054	6	2	14
35	1085	6	3	5
36	1116	6	3	36
37	1147	7	0	27
38	1178	7	1	18
39	1209	7	2	9

40	1240	7	3	0
41	1271	7	3	31
42	1302	8	0	22
43	1333	8	1	13
44	1364	8	2	4
45	1395	8	2	35
46	1426	8	3	26
47	1457	9	0	17
48	1488	9	1	8
49	1519	9	1	39
50	1550	9	2	30
51	1581	9	3	21
52	1612	10	0	12
53	1643	10	1	3
54	1674	10	1	34
55	1705	10	2	25
56	1736	10	3	16
57	1767	11	0	7
58	1798	11	0	38
59	1829	11	1	29
60	1860	11	2	20
61	1891	11	3	11
62	1922	12	0	2
63	1953	12	0	33
64	1984	12	1	24
65	2015	12	2	15
66	2046	12	3	6
67	2077	12	3	37
68	2108	13	0	28
69	2139	13	1	19
70	2170	13	2	10
71	2201	13	3	1
72	2232	13	3	32
73	2263	14	0	23

31 *squa. A. Q. P.* 32 *squa. A. Q. P.*

74	2294	14	1	14
75	2325	14	2	5
76	2356	14	2	36
77	2387	14	3	27
78	2418	15	0	18
79	2449	15	1	9
80	2480	15	2	0

32 *Squares Set the 32d.*

32	1024	6	1	24
33	1056	6	2	16
34	1088	6	3	8
35	1120	7	0	0
36	1152	7	0	32
37	1184	7	1	24
38	1216	7	2	16
39	1248	7	3	8
40	1280	8	0	0
41	1312	8	0	32
42	1344	8	1	24
43	1376	8	2	16
44	1408	8	3	8
45	1440	9	0	0
46	1472	9	0	32
47	1504	9	1	24
48	1536	9	2	16
49	1568	9	3	8
50	1600	10	0	0
51	1632	10	0	32
52	1664	10		24
53	1696	10	2	16
54	1728	10	3	8

55	1760	11	0	0
56	1792	11	0	32
57	1824	11	1	24
58	1856	11	2	16
59	1888	11	3	8
60	1920	12	0	0
61	1952	12	0	32
62	1984	12	1	24
63	2016	12	2	16
64	2048	12	3	8
65	2080	13	0	0
66	2112	13	0	32
67	2144	13	1	24
68	2176	13	2	16
69	2208	13	3	8
70	2240	14	0	0
71	2272	14	0	32
72	2304	14	1	24
73	2336	14	2	16
74	2368	14	3	8
75	2400	15	0	0
76	2432	15	0	32
77	2464	15	1	24
78	2496	15	2	16
79	2528	15	3	8
80	2560	16	0	0

33 *Squares Set the 33d.*

33	1089	6	3	9
34	1122	7	0	2
35	1155	7	0	35

33 *squa. A. Q. P.*33 *squa. A. Q. P.*

36	1188	7	1	28
37	1221	7	2	21
38	1254	7	3	14
39	1287	8	0	7
40	1320	8	1	0
41	1353	8	1	33
42	1386	8	2	26
43	1419	8	3	19
44	1452	9	0	12
45	1485	9	1	5
46	1518	9	1	38
47	1551	9	2	31
48	1584	9	3	24
49	1617	10	0	17
50	1650	10	1	10
51	1683	10	2	3
52	1716	10	2	36
53	1749	10	3	29
54	1782	11	0	22
55	1815	11	1	15
56	1848	11	2	8
57	1881	11	3	1
58	1914	11	3	34
59	1947	12	0	27
60	1980	12	1	20
61	2013	12	2	13
62	2046	12	3	6
63	2079	12	3	39
64	2112	13	0	32
65	2145	13	1	25
66	2178	13	2	18

67	2211	13	3	11
68	2244	14	0	4
69	2277	14	0	37
70	2310	14	1	30
71	2343	14	2	23
72	2376	14	3	16
73	2409	15	0	9
74	2442	15	1	2
75	2475	15	1	35
76	2508	15	2	28
77	2541	15	3	21
78	2574	16	0	14
79	2607	16	1	7
80	2640	16	2	0

34 *Squares Set the 34th.*

34	1156	7	0	36
35	1190	7	1	30
36	1224	7	2	24
37	1258	7	3	18
38	1292	8	0	12
39	1326	8	1	6
40	1360	8	2	0
41	1394	8	2	34
42	1428	8	3	28
43	1462	9	0	22
44	1496	9	1	16
45	1530	9	2	10
46	1564	9	3	4
47	1598	9	3	38
48	1632	10	0	32

34 sq. A. Q. P. 34 sq. A. Q. P.

49	1666	10	1	26	80	2720	17	0	0
50	1700	10	2	20	35 Squares Set the 35th.				
51	1734	10	3	14	35	1225	7	2	25
52	1768	11	0	8	36	1260	7	3	20
53	1802	11	1	2	37	1295	8	0	15
54	1836	11	1	36	38	1330	8	1	10
55	1870	11	2	30	39	1365	8	2	5
56	1904	11	3	24	40	1400	8	3	0
57	1938	12	0	18	41	1435	8	3	35
58	1972	12	1	12	42	1470	9	0	30
59	2006	12	2	6	43	1505	9	1	25
60	2040	12	3	0	44	1540	9	2	20
61	2074	12	3	34	45	1575	9	3	15
62	2108	13	0	28	46	1610	10	0	10
63	2142	13	1	22	47	1645	10	1	5
64	2176	13	2	16	48	1680	10	2	0
65	2210	13	3	10	49	1715	10	2	35
66	2244	14	0	4	50	1750	10	3	30
67	2278	14	0	38	51	1785	11	0	25
68	2312	14	1	32	52	1820	11	1	20
69	2346	14	2	26	53	1855	11	2	15
70	2380	14	3	20	54	1890	11	3	10
71	2414	15	0	14	55	1925	12	1	5
72	2448	15	1	8	56	1960	12	1	0
73	2482	15	2	2	57	1995	12	1	35
74	2516	15	2	36	58	2030	12	2	30
75	2550	15	3	30	59	2065	12	3	25
76	2584	16	0	24	60	2100	13	0	20
77	2618	16	1	18	61	2135	13	1	15
78	2652	16	2	12	62	2170	13	2	10
79	2686	16	3	6					

35 *squ. A. Q. P.* 36 *squ. A. Q. P.*

63	2205	13	3	5
64	2240	14	0	0
65	2275	14	0	35
66	2310	14	1	30
67	2345	14	2	25
68	2380	14	3	20
69	2415	15	0	15
70	2450	15	1	10
71	2485	15	2	5
72	2520	15	3	0
73	2555	15	3	35
74	2590	16	0	30
75	2625	16	1	25
76	2660	16	2	20
77	2695	16	3	15
78	2730	17	0	10
79	2765	17	1	5
80	2800	17	2	0

36 Squares Set the 36th

36	1296	8	0	16
37	1332	8	1	12
38	1368	8	2	8
39	1404	8	3	4
40	1440	9	0	0
41	1476	9	0	36
42	1512	9	1	32
43	1548	9	2	28
44	1584	9	3	24
45	1620	10	0	20
46	1656	10	1	16

47	1692	10	2	12
48	1728	10	3	8
49	1764	11	0	4
50	1800	11	1	0
51	1836	11	1	36
52	1872	11	2	32
53	1908	11	3	28
54	1944	12	0	24
55	1980	12	1	20
56	2016	12	2	16
57	2052	12	3	12
58	2088	13	0	8
59	2124	13	1	4
60	2160	13	2	0
61	2196	13	2	36
62	2232	13	3	32
63	2268	14	0	28
64	2304	14	1	24
65	2340	14	2	20
66	2376	14	3	16
67	2412	15	0	12
68	2448	15	1	8
69	2484	15	2	4
70	2520	15	3	0
71	2556	15	3	36
72	2592	16	0	32
73	2628	16	1	28
74	2664	16	2	24
75	2700	16	3	20
76	2736	17	0	16
77	2772	17	1	12

36 *squa. A. Q. P.* 37 *squa. A. Q. P.*

78	2808	17	2	8
79	2844	17	3	4
80	2880	18	0	0

37 *Squares Set the 37th.*

37	1369	8	2	9
38	1406	8	3	6
39	1443	9	0	3
40	1480	9	1	0
41	1517	9	1	37
42	1554	9	2	34
43	1591	9	3	31
44	1628	10	0	28
45	1665	10	1	25
46	1702	10	2	22
47	1739	10	3	19
48	1776	11	0	16
49	1813	11	1	13
50	1850	11	2	10
51	1887	11	3	7
52	1924	12	0	4
53	1961	12	1	1
54	1998	12	1	38
55	2035	12	2	35
56	2072	12	3	32
57	2109	13	0	29
58	2146	13	1	26
59	2183	13	2	23
60	2220	13	3	20
61	2257	14	0	17
62	2294	14	1	14

63	2331	14	2	11
64	2368	14	3	8
65	2405	15	0	5
66	2342	15	1	2
67	2479	15	1	39
68	2516	15	2	36
69	2553	15	3	33
70	2590	16	0	30
71	2627	16	1	27
72	2664	16	2	24
73	2701	16	3	21
74	2738	17	0	18
75	2775	17	1	15
76	2812	17	2	12
77	2849	17	3	9
78	2886	18	0	6
79	2923	18	1	3
80	2960	18	2	0

38 *Squares Set the 38th.*

38	1444	9	0	4
39	1482	9	1	2
40	1520	9	2	0
41	1558	9	2	38
42	1596	9	3	36
43	1634	10	0	34
44	1672	10	1	32
45	1710	10	2	30
46	1748	10	3	28
47	1786	11	0	26
48	1824	11	1	24

38 *squa. A. Q. P.*38 *squa. A. Q. P.*

49	1862	11	2	22
50	1900	11	3	20
51	1938	12	0	18
52	1976	12	1	16
53	2014	12	2	14
54	2052	12	3	12
55	2090	13	0	10
56	2128	13	1	8
57	2166	13	2	6
58	2204	13	3	4
59	2242	14	0	2
60	2280	14	1	0
61	2318	14	1	38
62	2356	14	2	36
63	2394	14	3	34
64	2432	15	0	32
65	2470	15	1	30
66	2508	15	2	28
67	2546	15	3	26
68	2584	16	0	24
69	2622	16	1	22
70	2660	16	2	20
71	2698	16	3	18
72	2736	17	0	16
73	2774	17	1	14
74	2812	17	2	12
75	2850	17	3	10
76	2888	18	0	8
77	2926	18	1	6
78	2964	18	2	4
79	3002	18	3	2

80 | 3040 | 19 | 0 | 0

39 *Squares Set the 39th.*

39	1521	9	2	1
40	1560	9	3	0
41	1599	9	3	39
42	1638	10	0	38
43	1677	10	1	37
44	1716	10	2	36
45	1755	10	3	35
46	1794	11	0	34
47	1833	11	1	33
48	1872	11	2	32
49	1911	11	3	31
50	1950	12	0	30
51	1989	12	1	29
52	2028	12	2	28
53	2067	12	3	27
54	2106	13	0	26
55	2145	13	1	25
56	2184	13	2	24
57	2223	13	3	23
58	2262	14	0	22
59	2301	14	1	21
60	2340	14	2	20
61	2379	14	3	19
62	2418	15	0	18
63	2457	15	1	17
64	2496	15	2	16
65	2535	15	3	15
66	2574	16	0	14

39 *squa. A. Q. P.*

40 *squa. A. Q. P.*

67	2613	16	1	13
68	2652	16	2	12
69	2691	16	3	11
70	2730	17	0	10
71	2769	17	1	9
72	2808	17	2	8
73	2847	17	3	7
74	2886	18	0	6
75	2925	18	1	5
76	2964	18	2	4
77	3003	18	3	3
78	3042	19	0	2
79	3081	19	1	1
80	3120	19	2	0

40 Squares Set the 40th.

40	1600	10	0	0
41	1640	10	1	0
42	1680	10	2	0
43	1720	10	3	0
44	1760	11	0	0
45	1800	11	1	0
46	1840	11	2	0
47	1880	11	3	0
48	1920	12	0	0
49	1960	12	1	0
50	2000	12	2	0
51	2040	12	3	0
52	2080	13	0	0
53	2120	13	1	0
54	2160	13	2	0

55	2200	13	3	0
56	2240	14	0	0
57	2280	14	1	0
58	2320	14	2	0
59	2360	14	3	0
60	2400	15	0	0
61	2440	15	1	0
62	2480	15	2	0
63	2520	15	3	0
64	2560	16	0	0
65	2600	16	1	0
66	2640	16	2	0
67	2680	16	3	0
68	2720	17	0	0
69	2760	17	1	0
70	2800	17	2	0
71	2840	17	3	0
72	2880	18	0	0
73	2920	18	1	0
74	2960	18	2	0
75	3000	18	3	0
76	3040	19	0	0
77	3080	19	1	0
78	3120	19	2	0
79	3160	19	3	0
80	3200	20	0	0

41 Squares Set the 41st.

41	1681	10	2	1
42	1722	10	3	2
43	1763	11	0	3

41 *squ.* A Q. P. 41 *squ.* A Q. P.

44	1804	11	1	4
45	1845	11	2	5
46	1886	11	3	6
47	1927	12	0	7
48	1968	12	1	8
49	2009	12	2	9
50	2050	12	3	10
51	2091	13	0	11
52	2132	13	1	12
53	2173	13	2	13
54	2214	13	3	14
55	2255	14	0	15
56	2296	14	1	16
57	2337	14	2	17
58	2378	14	3	18
59	2419	15	0	19
60	2460	15	1	20
61	2501	15	2	21
62	2542	15	3	22
63	2583	16	0	23
64	2624	16	1	24
65	2665	16	2	25
66	2706	16	3	26
67	2747	17	0	27
68	2788	17	1	28
69	2829	17	2	29
70	2870	17	3	30
71	2911	18	0	31
72	2952	18	1	32
73	2993	18	2	33
74	3034	18	3	34
75	3075	19	0	35
76	3116	19	1	36
77	3157	19	2	37

78	3128	19	3	38
79	3239	20	0	39
80	3280	20	2	0

42 Squares Set the 42d.

42	1764	11	0	4
43	1806	11	1	6
44	1848	11	2	8
45	1890	11	3	10
46	1932	12	0	12
47	1974	12	1	14
48	2016	12	2	16
49	2058	12	3	18
50	2100	13	0	20
51	2142	13	1	22
52	2184	13	2	24
53	2226	13	3	26
54	2268	14	0	28
55	2310	14	1	30
56	2352	14	2	32
57	2394	14	3	34
58	2436	15	0	36
59	2478	15	1	38
60	2520	15	2	0
61	2562	16	0	2
62	2604	16	1	4
63	2646	16	2	6
64	2688	16	3	8
65	2730	17	0	10
66	2772	17	1	12
67	2814	17	2	14
68	2856	17	3	16
69	2898	18	0	18
70	2940	18	1	20

42 *squa. A. Q. P.* 43 *squa. A. Q. P.*

71	2982	18	2	22
72	3024	18	3	24
73	3066	19	0	26
74	3108	19	1	28
75	3150	19	2	30
76	3192	19	3	32
77	3234	20	0	34
78	3276	20	1	36
79	3318	20	2	38
80	3360	21	0	0

43 *Squares Set the 43d.*

43	1849	11	2	9
44	1892	11	3	12
45	1935	12	0	15
46	1978	12	1	18
47	2021	12	2	21
48	2064	12	3	24
49	2107	13	0	27
50	2150	13	1	30
51	2193	13	2	33
52	2236	13	3	36
53	2279	14	0	39
54	2322	14	2	2
55	2365	14	3	5
56	2408	15	0	8
57	2451	15	1	11
58	2494	15	2	14
59	2537	15	3	17
60	2580	16	0	20
61	2623	16	1	23

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62	2666	16	2	26
63	2709	16	3	29
64	2752	17	0	32
65	2795	17	1	35
66	2838	17	2	38
67	2881	18	0	1
68	2924	18	1	4
69	2967	18	2	7
70	3010	18	3	10
71	3053	19	0	13
72	3096	19	1	16
73	3139	19	2	19
74	3182	19	3	22
75	3225	20	0	25
76	3268	20	1	28
77	3311	20	2	31
78	3354	20	3	34
79	3397	21	0	37
80	3440	21	2	0

44 *Squares Set the 44th.*

44	1936	12	0	16
45	1980	12	1	20
46	2024	12	2	24
47	2068	12	3	28
48	2112	13	0	32
49	2156	13	1	36
50	2200	13	3	0
51	2244	14	0	4
52	2288	14	1	8
35	2332	14	2	12

44 *squa. A. Q. P.* 45 *squa. A. Q. P.*

54	2376	14	3	16
55	2420	15	0	20
56	2464	15	1	24
57	2508	15	2	28
58	2552	15	3	32
59	2596	16	0	36
60	2640	16	2	0
61	2684	16	3	4
62	2728	17	0	8
63	2772	17	1	12
64	2816	17	2	16
65	2860	17	3	20
66	2904	18	0	24
67	2948	18	1	28
68	2992	18	2	32
69	3036	18	3	36
70	3080	19	1	0
71	3124	19	2	4
72	3168	19	3	8
73	3212	20	0	12
74	3256	20	1	16
75	3300	20	2	20
76	3344	20	3	24
77	3388	21	0	28
78	3432	21	1	32
79	3476	21	2	36
70	3520	22	0	0

45 *Squares Set the 45th.*

45	2025	12	2	25
46	2070	12	3	30

47	2115	13	0	35
48	2160	13	2	0
49	2205	13	3	5
50	2250	14	0	10
51	2295	14	1	15
52	2340	14	2	20
53	2385	14	3	25
54	2430	15	0	30
55	2475	15	1	35
56	2520	15	3	0
57	2565	16	0	5
58	2610	16	1	10
59	2655	16	2	15
60	2700	16	3	20
61	2745	17	0	25
62	2790	17	1	30
63	2835	17	2	35
64	2880	18	0	0
65	2925	18	1	5
66	2970	18	2	10
67	3015	18	3	15
68	3060	19	0	20
69	3105	19	1	25
70	3150	19	2	30
71	3195	19	3	35
72	3240	20	1	0
73	3285	20	2	5
74	3330	20	3	10
75	3375	21	0	15
76	3420	21	1	20
77	3465	21	2	25

45 *squa. A. Q. P.* 46 *squa. A. Q. P.*

78	3510	21	3	30
79	3555	22	0	35
80	3600	22	2	0

46 Squares Set the 46th

46	2116	13	0	36
47	2162	13	2	2
48	2208	13	3	8
49	2254	14	0	14
50	2300	14	1	20
51	2346	14	2	26
52	2392	14	3	32
53	2438	15	0	38
54	2484	15	2	4
55	2530	15	3	10
56	2576	16	0	16
57	2622	16	1	22
58	2668	16	2	28
59	2714	16	3	34
60	2760	17	1	0
61	2806	17	2	6
62	2852	17	3	12
63	2898	18	0	18
64	2944	18	1	24
65	2990	18	2	30
66	3036	18	3	36
67	3082	19	1	2
68	3128	19	2	8
69	3174	19	3	14
70	3220	20	0	20
71	3266	20	1	26

72	3312	20	2	32
73	3358	20	3	38
74	3404	21	1	4
75	3450	21	2	10
76	3496	21	3	16
77	3542	22	0	22
78	3588	22	1	28
79	3634	22	2	34
80	3680	23	0	0

47 Squares Set the 47th.

47	2209	13	3	9
48	2256	14	0	16
49	2303	14	1	23
50	2350	14	2	30
51	2397	14	3	37
52	2444	15	1	4
53	2491	15	2	11
54	2538	15	3	18
55	2585	16	0	25
56	2632	16	1	32
57	2679	16	2	39
58	2726	17	0	6
59	2773	17	1	13
60	2820	17	2	20
61	2867	17	3	27
62	2914	18	0	34
63	2961	18	2	1
64	3008	18	3	8
65	3055	19	0	15
66	3102	19	1	22

47 *squa. A. Q. P.* 48 *squa. A. Q. P.*

67	3149	19	2	29
68	3196	19	3	36
69	3243	20	1	3
70	3290	20	2	10
71	3337	20	3	17
72	3384	21	0	24
73	3431	21	1	31
74	3478	21	2	38
75	3525	22	0	5
76	3572	22	1	12
77	3619	22	2	19
78	3666	22	3	26
79	3713	23	0	33
80	3760	23	2	0

48 Squares Set the 48th.

48	2304	14	1	24
49	2352	14	2	32
50	2400	15	0	0
51	2448	15	1	8
52	2496	15	2	16
53	2544	15	3	24
54	2592	16	0	32
55	2640	16	2	0
56	2688	16	3	8
57	2736	17	0	16
58	2784	17	1	24
59	2832	17	2	32
60	2880	18	0	0
61	2928	18	1	8
62	2976	18	2	16

63	3024	18	3	24
64	3072	19	0	32
65	3120	19	2	0
66	3168	19	3	8
67	3216	20	0	16
68	3264	20	1	24
69	3312	20	2	32
70	3360	21	0	0
71	3408	21	1	8
72	3456	21	2	16
73	3504	21	3	24
74	3552	22	0	32
75	3600	22	2	0
76	3648	22	3	8
77	3696	23	0	16
78	3744	23	1	24
79	3792	23	2	32
80	3840	24	0	0

49 Squares Set the 49th.

49	2401	15	0	1
40	2450	15	1	10
51	2499	15	2	19
52	2548	15	3	28
53	2597	16	0	37
54	2646	16	2	6
55	2695	16	3	15
56	2744	17	0	24
57	2793	17	1	33
58	2842	17	3	2
59	2891	18	0	11

49 *squa. A. Q. P.* 50 *squa. A. Q. P.*

60	2940	18	1	20
61	2989	18	2	29
62	3038	18	3	38
63	3087	19	1	7
64	3136	19	2	16
65	3185	19	3	25
66	3234	20	0	34
67	3283	20	2	3
68	3332	20	3	12
69	3381	21	0	21
70	3430	21	1	30
71	3479	21	2	39
72	3528	32	0	8
73	3577	22	1	17
74	3626	22	2	26
75	3675	22	3	35
76	3724	23	1	4
77	3773	23	2	13
78	3822	23	3	22
79	3871	24	0	31
70	3920	24	9	0

50 Squares Set the 50th.

50	2500	15	2	20
51	2550	15	3	30
52	2600	16	1	0
53	2650	16	2	10
54	2700	16	3	20
55	2750	17	0	30
56	2800	17	2	0
57	2850	17	3	10

58	2900	18	0	20
59	2950	18	1	30
60	3000	18	3	0
61	3050	19	0	10
62	3100	19	1	20
63	3150	19	2	30
64	3200	20	0	0
65	3250	20	1	10
66	3300	20	2	20
67	3350	20	3	30
68	3400	21	1	0
69	3450	21	2	10
70	3500	21	3	20
71	3550	22	0	30
72	3600	22	2	0
73	3650	22	3	10
74	3700	23	0	20
75	3750	23	1	30
76	3800	23	3	0
77	3850	24	0	10
78	3900	24	1	20
79	3950	24	2	30
80	4000	25	0	0

51 Squares Set the 51th.

51	2601	16	1	1
52	2652	16	2	12
53	2703	16	3	23
54	2754	17	0	34
55	2805	17	2	5
56	2856	17	3	16

51 *squa. A. Q. P.* 52 *squa. A. Q. P.*

57	2907	18	0	27
58	2958	18	1	38
59	3009	18	3	9
60	3060	19	0	20
61	3111	19	1	31
62	3162	19	3	2
63	3213	20	0	13
64	3264	20	1	24
65	3315	20	2	35
66	3366	21	0	6
67	3417	21	1	17
68	3468	21	2	28
69	3519	21	3	39
70	3570	22	1	10
71	3621	22	2	21
72	3672	22	3	32
73	3723	23	1	3
74	3774	23	2	14
75	3825	23	3	25
76	3876	24	0	36
77	3927	24	2	7
78	3978	24	3	18
79	4029	25	0	29
80	4080	25	2	0

52 Squares Set the 52d.

52	2704	16	3	24
53	2756	17	0	36
54	2808	17	2	8
55	2860	17	3	20
56	2912	18	0	32

57	2964	18	2	4
58	3016	18	3	16
59	3068	19	0	28
50	3120	19	2	0
61	3172	19	3	12
62	3224	20	0	24
63	3276	20	1	36
64	3328	20	3	8
65	3380	21	0	20
66	3432	21	1	32
67	3484	21	3	4
68	3536	22	0	16
69	3588	22	1	28
70	3640	22	3	0
71	3692	23	0	12
72	3744	23	1	24
73	3796	23	2	36
74	3848	24	0	8
75	3900	24	1	20
76	3952	24	2	32
17	4004	25	0	4
78	4056	25	1	16
79	4108	25	2	28
80	4160	25	0	0

53 Square Set the 53d.

53	2809	17	2	9
54	2862	17	3	22
55	2915	18	0	35
56	2968	18	2	8
57	3021	18	3	21

53 *squa. A. Q. P.* 54 *squa. A. Q. P.*

58	3074	19	0	34
59	3127	19	2	7
60	3180	19	3	20
61	3233	20	0	33
62	3286	20	2	6
63	3339	20	3	19
64	3392	21	0	32
65	3445	21	2	5
66	3498	21	3	18
67	3551	22	0	31
68	3604	22	2	4
69	3657	22	3	17
70	3710	23	0	30
71	3763	23	2	3
72	3816	23	3	16
73	3869	24	0	29
74	3922	24	2	2
75	3975	24	3	15
76	4028	25	0	28
77	4081	25	2	1
78	4134	25	3	14
79	4187	26	0	27
80	4240	26	2	0

54 *Squares Set the 55th.*

54	2916	18	0	36
55	2970	18	2	10
56	3024	18	3	24
57	3078	19	0	38
58	3132	19	2	12
59	3186	19	3	26

60	3240	20	1	0
61	3294	20	2	14
62	3348	20	3	28
63	3402	21	1	2
64	3456	21	2	16
65	3510	21	3	30
66	4564	22	1	4
67	3618	22	2	18
68	3672	22	3	32
69	3726	23	1	6
70	3780	23	2	20
71	3834	23	3	34
72	3888	24	1	8
73	3942	24	2	22
74	3996	24	3	36
75	4050	25	1	10
76	4104	25	2	24
77	4158	25	3	38
78	4212	26	1	12
79	4266	26	2	26
80	4320	27	0	0

55 *Squares Set the 55th.*

55	3025	18	3	25
56	3080	19	1	0
57	3135	19	2	15
58	3190	19	3	30
59	3245	20	1	5
60	3300	20	2	20
61	3355	20	3	35
62	3410	21	1	10

55 *squa. A. Q. P.* 56 *squa. A. Q. P.*

63	3465	21	2	25
64	3520	22	0	0
65	3575	22	1	15
66	3630	22	2	30
67	3685	23	0	5
68	3740	23	1	20
69	3795	23	2	35
70	3850	24	0	10
71	3905	24	1	25
72	3960	24	3	0
75	4015	25	0	15
74	4070	25	1	30
75	4125	25	3	5
76	4180	26	0	20
77	4235	26	1	35
78	4290	26	3	10
76	4345	27	0	25
80	4400	27	2	0

56 Squares Set the 56th.

56	3136	19	2	16
57	3192	19	3	32
58	3248	20	1	8
59	3304	20	2	24
60	3360	21	0	0
61	3416	21	1	16
62	3472	21	2	32
63	3528	22	0	8
64	3584	22	1	24
65	3640	22	3	0
69	3696	23	0	16
67	3752	23	1	32
68	3808	23	3	8
69	3864	24	0	24

70	3920	24	2	0
71	3976	24	3	16
72	4032	25	0	32
73	4088	25	2	8
74	4144	25	3	24
75	4200	26	1	0
76	4256	26	2	16
77	4312	26	3	32
78	4368	27	1	8
79	4424	27	2	24
80	4480	28	0	0

57 Squares Set the 57th.

57	2349	20	1	9
58	3306	20	2	26
69	3363	21	0	3
60	3420	21	1	20
61	3477	21	2	37
62	3534	22	0	14
63	3591	22	1	31
64	3648	22	3	8
65	3705	23	0	25
66	3762	23	2	2
67	3819	23	3	19
68	3876	24	0	36
69	3933	24	2	13
70	3990	24	3	30
71	4047	25	1	7
72	4104	25	2	24
73	4161	26	0	1
74	4218	26	1	18
75	4275	26	2	35
76	4332	27	0	12
77	4389	27	1	29

58 *squa. A. Q. P.* 59 *squa. A. Q. P.*

78	4446	27	3	6
79	4503	28	0	23
80	4560	28	2	0

58 Squares Set the 58th.

58	3364	21	0	4
59	3422	21	1	22
60	3480	21	3	0
61	3538	22	0	18
62	3596	22	1	36
63	3654	22	3	14
64	3712	23	0	32
65	3770	23	2	10
66	3828	23	3	28
67	3886	24	1	6
68	3944	24	2	24
69	4002	25	0	2
70	4060	25	1	20
71	4118	25	2	38
72	4176	26	0	16
73	4234	26	1	34
74	4292	26	3	12
75	4350	27	0	30
76	4408	27	2	8
77	4466	27	3	26
78	4524	28	1	4
79	4582	28	2	22
80	4640	29	0	0

59 Squares Set the 59th.

59	3481	21	3	1
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60	3540	22	0	20
61	3599	22	1	39
62	3658	22	3	18
63	3717	23	0	37
64	3776	23	2	16
65	3835	23	3	35
66	3894	24	1	14
67	3953	24	2	33
68	4012	25	0	12
69	4071	25	1	31
70	4130	25	3	10
71	4189	26	0	29
72	4248	26	2	8
73	4307	26	3	27
74	4366	27	1	6
75	4425	27	2	25
76	4484	28	0	4
77	4543	28	1	23
78	4602	28	3	2
79	4661	29	0	21
80	4720	29	2	0

60 Squares Set the 60th.

60	3600	22	2	0
61	3660	22	3	20
62	3720	23	1	0
63	3780	23	2	20
65	3840	24	0	0
65	3900	24	1	20
66	3960	24	3	0
67	4020	25	0	20

61 *squa. A. Q. P.* **62** *squa. A. Q. P.*

68	4080	25	2	0
69	4140	25	3	20
70	4200	26	1	0
71	4260	26	2	20
72	4320	27	0	0
73	4380	27	1	20
74	4440	27	3	0
75	4500	28	0	20
76	4560	28	2	0
77	4620	28	3	20
78	4680	29	1	0
79	4740	29	2	20
80	4800	30	0	0

61 Squares Sect the 61st.

61	3721	23	1	1
62	3782	23	2	22
63	3843	24	0	3
64	3904	34	1	24
65	3965	24	3	5
66	4026	25	0	26
67	4087	25	2	7
68	4148	25	3	28
69	4209	26	1	9
70	4270	26	2	30
71	4331	27	0	11
72	4392	27	1	32
73	4453	27	3	13
74	4514	28	0	34
75	4575	28	2	15
76	4636	28	3	36

77	4697	29	1	17
78	4758	29	2	38
79	4819	30	0	19
80	4880	30	2	0

62 Squares Sect the 62d.

62	3844	24	0	4
63	3906	24	1	26
64	3968	24	3	8
65	4030	25	0	30
66	4092	25	2	12
67	4154	25	3	34
68	4216	26	1	16
69	4278	26	2	38
70	4340	27	0	20
71	4402	27	2	2
72	4464	27	3	24
73	4526	28	1	6
74	4588	28	2	28
75	4650	29	0	10
76	4712	26	1	32
77	4774	29	3	14
78	4836	30	0	36
79	4898	30	2	18
80	4960	31	0	0

63 Square Sect the 63d.

63	3969	24	3	9
64	4032	25	0	32
65	4095	25	2	15
66	4158	25	3	38

63 *squa. A. Q. P.* 64 *squa. A. Q. P.*

67	4221	26	1	21
68	4284	26	3	4
69	4347	27	0	27
70	4410	27	2	10
71	4473	27	3	33
72	4536	28	1	16
73	4599	28	2	39
74	4662	29	0	22
75	4725	29	2	5
76	4788	29	3	28
77	4851	30	1	11
78	4914	30	2	34
79	4977	31	0	17
80	5040	31	2	0

64 Squares Sect the 64th.

64	4096	25	2	16
65	4160	26	0	0
66	4224	26	1	24
67	4288	26	3	8
68	4352	27	0	32
69	4416	27	2	16
70	4480	28	0	0
71	4544	28	1	24
72	4608	28	3	8
73	4672	29	0	32
74	4736	29	2	16
75	4800	30	0	0
76	4864	30	1	24
77	4928	30	3	8
78	4992	31	0	32

79	5056	31	2	16
80	5120	32	0	0

65 Squares Sect the 65th.

65	4225	26	1	25
66	4290	26	3	10
67	4355	27	0	35
68	4420	27	2	20
69	4485	28	0	5
70	4550	28	1	30
71	4615	28	3	15
72	4680	29	1	0
73	4745	29	2	25
74	4810	30	0	10
75	4875	30	1	35
76	4940	30	3	20
77	5005	31	1	5
78	5070	31	2	30
79	5135	32	0	15
80	5200	32	2	0

66 Squares Sect the 66th.

66	4356	27	0	36
67	4422	27	2	22
68	4488	28	0	8
69	4554	28	1	34
70	4620	28	3	20
71	4686	29	1	6
72	4752	29	2	32
73	4818	30	0	18
74	4884	30	2	4

66 *squa. A. Q. P.* 68 *squa. A. Q. P.*

75	4950	30	3	30
76	5016	31	1	16
77	5082	31	3	2
78	5148	32	0	28
79	5214	32	2	14
80	5280	33	0	0

67 Squares Set the 6th.

67	4489	28	0	9
68	4556	28	1	36
69	4623	28	3	23
70	4690	29	1	10
71	4757	29	2	37
72	4824	30	0	24
73	4891	30	2	11
74	4958	30	3	38
75	5025	31	1	25
76	5092	31	3	12
77	5159	32	0	39
78	5226	32	2	26
79	5293	33	0	13
80	5360	33	2	0

68 Squares Set the 68th.

68	4624	28	3	24
69	4692	29	1	12
70	4760	29	3	0
71	4828	30	0	28
72	4896	30	2	16
73	4964	31	0	4
74	5032	31	1	32

75	5100	31	3	20
76	5168	32	1	8
77	5236	32	2	36
78	5304	33	0	24
79	5372	33	2	12
80	5440	34	0	0

69 Squares Set the 69th.

69	4761	29	3	1
70	4830	30	0	30
71	4899	30	2	19
72	4968	31	0	8
73	5037	31	1	37
74	5106	31	3	26
75	5175	32	1	15
76	5244	32	3	4
77	5313	33	0	33
78	5382	33	2	22
79	5451	34	0	11
70	5520	34	2	0

70 Squares Set the 70th.

70	4900	30	2	20
71	4970	31	0	10
72	5040	31	2	0
73	5110	31	3	30
74	5180	32	1	20
75	5250	32	3	10
76	5320	33	1	0
77	5390	33	2	30
78	5460	34	0	20

70 *squa. A. Q. P.* 73 *squa. A. Q. P.*

79	5530	34	2	10
80	5600	35	0	0

71 *Squares Sect the 71st.*

71	5041	31	2	1
72	5112	31	3	32
73	5183	32	1	23
74	5254	32	3	14
75	5325	33	1	5
76	5396	33	2	35
77	5467	34	0	27
78	5538	34	2	18
79	5609	35	0	9
80	5680	35	2	0

72 *Squares Sect the 72d.*

72	5184	32	1	24
73	5256	32	3	16
74	5328	23	1	8
75	5400	33	3	0
76	5472	34	0	32
77	5544	34	2	24
78	5616	35	0	16
79	5688	35	2	8
80	5760	36	0	0

73 *Squares Sect the 73d.*

73	5329	33	1	9
74	5402	33	3	2
75	5475	34	3	25
76	5548	34	2	28

77	5621	35	0	21
78	5694	35	2	14
79	5767	36	0	7
70	5840	36	2	0

74 *Squares Sect the 74th.*

74	5476	34	0	36
75	5550	34	2	30
76	5624	35	0	24
77	5698	35	2	18
78	5772	36	0	12
78	5846	36	2	6
80	5920	37	0	0

75 *Squares Sect the 75th.*

75	5625	35	0	25
76	5700	35	2	20
77	5775	36	0	15
78	5850	36	2	10
79	5925	37	0	5
70	6000	37	2	0

76 *Squares Sect the 76th.*

76	5776	36	0	16
77	5852	36	2	12
78	5928	37	0	8
79	6004	37	2	4
80	6080	38	0	0

77 *Squares Sect the 77th.*

77	5929	37	0	9
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A TABLE for odd Measure, as Quarter and half Quarter, and half and three Quarters.

Length.	h.Q.	Q.	H.	3Q.
13	$1\frac{5}{8}$	$3\frac{1}{4}$	$6\frac{1}{2}$	$9\frac{1}{4}$
14	$1\frac{6}{8}$	$3\frac{1}{2}$	7	$10\frac{1}{2}$
15	$1\frac{7}{8}$	$3\frac{2}{3}$	$7\frac{1}{2}$	$11\frac{1}{4}$
16	2	4	8	12
17	$2\frac{1}{8}$	$4\frac{1}{4}$	$8\frac{1}{2}$	$12\frac{3}{4}$
18	$2\frac{2}{8}$	$4\frac{1}{2}$	39	$13\frac{1}{2}$
19	$2\frac{3}{8}$	$4\frac{2}{3}$	$9\frac{1}{2}$	$14\frac{1}{4}$
20	$2\frac{4}{8}$	5	10	15
21	$2\frac{5}{8}$	$5\frac{1}{4}$	$10\frac{1}{2}$	$15\frac{3}{4}$
22	$2\frac{6}{8}$	$5\frac{1}{2}$	11	$16\frac{1}{2}$
23	$2\frac{7}{8}$	$5\frac{2}{3}$	$11\frac{1}{2}$	$17\frac{1}{4}$
24	3	6	12	18
25	$3\frac{1}{8}$	$6\frac{1}{4}$	$12\frac{1}{2}$	$18\frac{3}{4}$
26	$3\frac{2}{8}$	$6\frac{1}{2}$	13	$19\frac{1}{2}$
27	$3\frac{3}{8}$	$6\frac{2}{3}$	$13\frac{1}{2}$	$20\frac{1}{4}$
28	$3\frac{4}{8}$	7	14	21
29	$3\frac{5}{8}$	$7\frac{1}{4}$	$14\frac{1}{2}$	$21\frac{3}{4}$
30	$3\frac{6}{8}$	$7\frac{1}{2}$	15	$22\frac{1}{2}$
31	$3\frac{7}{8}$	$7\frac{2}{3}$	$15\frac{1}{2}$	$23\frac{1}{4}$
32	4	8	16	24
33	$4\frac{1}{8}$	$8\frac{1}{4}$	$16\frac{1}{2}$	$24\frac{3}{4}$
34	$4\frac{2}{8}$	$8\frac{1}{2}$	17	$25\frac{1}{2}$
35	$4\frac{3}{8}$	$8\frac{2}{3}$	$17\frac{1}{2}$	$26\frac{1}{4}$
36	$4\frac{4}{8}$	9	18	27
37	$4\frac{5}{8}$	$9\frac{1}{4}$	$18\frac{1}{2}$	$27\frac{3}{4}$
38	$4\frac{6}{8}$	$9\frac{1}{2}$	19	$28\frac{1}{2}$
39	$4\frac{7}{8}$	$9\frac{2}{3}$	$19\frac{1}{2}$	$29\frac{1}{4}$
40	5	10	20	30

Length.	h.Q.	Q.	H.	3Q.
41	$5\frac{1}{8}$	$10\frac{1}{4}$	$20\frac{1}{2}$	$30\frac{1}{3}$
42	$5\frac{2}{8}$	$10\frac{1}{2}$	21	$31\frac{1}{2}$
43	$5\frac{3}{8}$	$10\frac{1}{3}$	$21\frac{1}{2}$	$32\frac{1}{4}$
44	$5\frac{4}{8}$	11	22	33
45	$5\frac{5}{8}$	$11\frac{1}{4}$	$22\frac{1}{2}$	$33\frac{1}{3}$
46	$5\frac{6}{8}$	$11\frac{1}{2}$	23	$34\frac{1}{2}$
47	$5\frac{7}{8}$	$11\frac{1}{3}$	$23\frac{1}{2}$	$35\frac{1}{4}$
48	6	12	24	36
49	$6\frac{1}{8}$	$12\frac{1}{4}$	$24\frac{1}{2}$	$36\frac{1}{3}$
50	$6\frac{2}{8}$	$12\frac{1}{2}$	25	$37\frac{1}{2}$
51	$6\frac{3}{8}$	$12\frac{1}{3}$	$25\frac{1}{2}$	$38\frac{1}{4}$
52	$6\frac{4}{8}$	13	26	39
53	$6\frac{5}{8}$	$13\frac{1}{4}$	$26\frac{1}{2}$	$39\frac{1}{3}$
54	$6\frac{6}{8}$	$13\frac{1}{2}$	27	$40\frac{1}{2}$
55	$6\frac{7}{8}$	$13\frac{1}{3}$	$27\frac{1}{2}$	$41\frac{1}{4}$
56	7	14	28	42
57	$7\frac{1}{8}$	$14\frac{1}{4}$	$28\frac{1}{2}$	$42\frac{1}{3}$
58	$7\frac{2}{8}$	$14\frac{1}{2}$	29	$43\frac{1}{2}$
59	$7\frac{3}{8}$	$14\frac{1}{3}$	$29\frac{1}{2}$	$44\frac{1}{4}$
60	$7\frac{4}{8}$	15	30	45
61	$7\frac{5}{8}$	$15\frac{1}{4}$	$30\frac{1}{2}$	$45\frac{1}{3}$
62	$7\frac{6}{8}$	$15\frac{1}{2}$	31	$46\frac{1}{2}$
63	$7\frac{7}{8}$	$15\frac{1}{3}$	$31\frac{1}{2}$	$47\frac{1}{4}$
64	8	16	32	48
65	$8\frac{1}{8}$	$16\frac{1}{4}$	$32\frac{1}{2}$	$48\frac{1}{3}$
66	$8\frac{2}{8}$	$16\frac{1}{2}$	33	$49\frac{1}{2}$
67	$8\frac{3}{8}$	$16\frac{1}{3}$	$33\frac{1}{2}$	$50\frac{1}{4}$
68	$8\frac{4}{8}$	17	34	51
69	$8\frac{5}{8}$	$17\frac{1}{4}$	$34\frac{1}{2}$	$51\frac{1}{3}$
70	$8\frac{6}{8}$	$17\frac{1}{2}$	35	$52\frac{1}{2}$
71	$8\frac{7}{8}$	$17\frac{1}{3}$	$35\frac{1}{2}$	$53\frac{1}{4}$
72	9	18	36	54
73	$9\frac{1}{8}$	$18\frac{1}{4}$	$36\frac{1}{2}$	$54\frac{1}{3}$

LAND MEASURER.

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Length.	h.Q.	Q.	H.	3Q.
74	$9\frac{2}{8}$	$18\frac{1}{2}$	37	$55\frac{1}{2}$
75	$9\frac{3}{8}$	$18\frac{1}{3}$	$37\frac{1}{2}$	$56\frac{1}{4}$
76	$9\frac{4}{8}$	19	38	57
77	$9\frac{5}{8}$	$19\frac{1}{4}$	$38\frac{1}{2}$	$57\frac{1}{3}$
78	$9\frac{6}{8}$	$19\frac{1}{2}$	39	$58\frac{1}{2}$
79	$9\frac{7}{8}$	$19\frac{1}{3}$	$39\frac{1}{2}$	$59\frac{1}{4}$
80	10	20	40	60
81	$10\frac{1}{8}$	$20\frac{1}{4}$	$40\frac{1}{2}$	$60\frac{1}{3}$
82	$10\frac{2}{8}$	$20\frac{1}{2}$	41	$61\frac{1}{2}$
83	$10\frac{3}{8}$	$20\frac{1}{3}$	$41\frac{1}{2}$	$62\frac{1}{4}$
84	$10\frac{4}{8}$	21	42	63
85	$10\frac{5}{8}$	$21\frac{1}{4}$	$42\frac{1}{2}$	$63\frac{1}{3}$
86	$10\frac{6}{8}$	$21\frac{1}{2}$	43	$64\frac{1}{2}$
87	$10\frac{7}{8}$	$21\frac{1}{3}$	$43\frac{1}{2}$	$65\frac{1}{4}$
88	11	22	44	66
89	$11\frac{1}{8}$	$22\frac{1}{4}$	$44\frac{1}{2}$	$66\frac{1}{3}$
90	$11\frac{2}{8}$	$22\frac{1}{2}$	45	$67\frac{1}{2}$
91	$11\frac{3}{8}$	$22\frac{1}{3}$	$45\frac{1}{2}$	$68\frac{1}{4}$
92	$11\frac{4}{8}$	23	46	69
93	$11\frac{5}{8}$	$23\frac{1}{4}$	$46\frac{1}{2}$	$69\frac{1}{3}$
94	$11\frac{6}{8}$	$23\frac{1}{2}$	47	$70\frac{1}{2}$
95	$11\frac{7}{8}$	$23\frac{1}{3}$	$47\frac{1}{2}$	$71\frac{1}{4}$
96	12	24	48	72
97	$12\frac{1}{8}$	$24\frac{1}{4}$	$48\frac{1}{2}$	$72\frac{1}{3}$
98	$12\frac{2}{8}$	$24\frac{1}{2}$	49	$73\frac{1}{2}$
99	$12\frac{3}{8}$	$24\frac{1}{3}$	$49\frac{1}{2}$	$74\frac{1}{4}$
100	$12\frac{4}{8}$	25	50	75
101	$12\frac{5}{8}$	$25\frac{1}{4}$	$50\frac{1}{2}$	$75\frac{1}{3}$
102	$12\frac{6}{8}$	$25\frac{1}{2}$	51	$76\frac{1}{2}$
103	$12\frac{7}{8}$	$25\frac{1}{3}$	$51\frac{1}{2}$	$77\frac{1}{4}$
104	13	26	52	78

O

A TABLE for to find the half of any Number
to 232.

Leng.	H.	Leng.	H.	Leng.	H.
20	10	54	27	88	44
21	$10\frac{1}{2}$	55	$27\frac{1}{2}$	89	$44\frac{1}{2}$
22	11	56	28	90	45
23	$11\frac{1}{2}$	57	$28\frac{1}{2}$	91	$45\frac{1}{2}$
24	12	58	29	92	46
25	$12\frac{1}{2}$	59	$29\frac{1}{2}$	93	$46\frac{1}{2}$
26	13	60	30	94	47
27	$13\frac{1}{2}$	61	$30\frac{1}{2}$	95	$47\frac{1}{2}$
28	14	62	31	96	48
29	$14\frac{1}{2}$	63	$31\frac{1}{2}$	97	$48\frac{1}{2}$
30	15	64	32	98	49
31	$15\frac{1}{2}$	65	$32\frac{1}{2}$	99	$49\frac{1}{2}$
32	16	66	33	100	50
33	$16\frac{1}{2}$	67	$33\frac{1}{2}$	101	$50\frac{1}{2}$
34	17	68	34	102	51
35	$17\frac{1}{2}$	69	$34\frac{1}{2}$	103	$51\frac{1}{2}$
36	18	70	35	104	52
37	$18\frac{1}{2}$	71	$35\frac{1}{2}$	105	$52\frac{1}{2}$
38	19	72	36	106	53
39	$19\frac{1}{2}$	73	$36\frac{1}{2}$	107	$53\frac{1}{2}$
40	20	74	37	108	54
41	$20\frac{1}{2}$	75	$37\frac{1}{2}$	109	$54\frac{1}{2}$
42	21	76	38	110	55
43	$21\frac{1}{2}$	77	$38\frac{1}{2}$	111	$55\frac{1}{2}$
44	22	78	39	112	56
45	$22\frac{1}{2}$	79	$39\frac{1}{2}$	113	$56\frac{1}{2}$
46	23	80	40	114	57
47	$23\frac{1}{2}$	81	$40\frac{1}{2}$	115	$57\frac{1}{2}$
48	24	82	41	116	58
49	$24\frac{1}{2}$	83	$41\frac{1}{2}$	117	$58\frac{1}{2}$
50	25	84	42	118	59
51	$25\frac{1}{2}$	85	$42\frac{1}{2}$	119	$59\frac{1}{2}$
52	26	86	43	120	60
53	$26\frac{1}{2}$	87	$43\frac{1}{2}$	121	$60\frac{1}{2}$

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Leng.	H.	Leng.	H.	Leng.	H.
122	61	159	79 $\frac{1}{2}$	196	98
123	61 $\frac{1}{2}$	160	80	197	98 $\frac{1}{2}$
124	62	161	80 $\frac{1}{2}$	198	99
125	62 $\frac{1}{2}$	162	81	199	99 $\frac{1}{2}$
126	63	163	81 $\frac{1}{2}$	200	100
127	63 $\frac{1}{2}$	164	82	201	100 $\frac{1}{2}$
128	64	165	82 $\frac{1}{2}$	202	101
129	64 $\frac{1}{2}$	166	83	203	101 $\frac{1}{2}$
130	65	167	83 $\frac{1}{2}$	204	102
131	65 $\frac{1}{2}$	168	84	205	102 $\frac{1}{2}$
132	66	169	84 $\frac{1}{2}$	206	103
133	66 $\frac{1}{2}$	170	85	207	103 $\frac{1}{2}$
134	67	171	85 $\frac{1}{2}$	208	104
135	67 $\frac{1}{2}$	172	86	209	104 $\frac{1}{2}$
136	68	173	86 $\frac{1}{2}$	210	105
137	68 $\frac{1}{2}$	174	87	211	105 $\frac{1}{2}$
138	69	175	87 $\frac{1}{2}$	212	106
139	69 $\frac{1}{2}$	176	88	213	106 $\frac{1}{2}$
140	70	177	88 $\frac{1}{2}$	214	107
141	70 $\frac{1}{2}$	178	89	215	107 $\frac{1}{2}$
142	71	179	89 $\frac{1}{2}$	216	108
143	71 $\frac{1}{2}$	180	90	217	108 $\frac{1}{2}$
144	72	181	90 $\frac{1}{2}$	218	109
145	72 $\frac{1}{2}$	182	91	219	109 $\frac{1}{2}$
146	73	183	91 $\frac{1}{2}$	220	110
147	73 $\frac{1}{2}$	184	92	221	110 $\frac{1}{2}$
148	74	185	92 $\frac{1}{2}$	222	111
149	74 $\frac{1}{2}$	186	93	223	111 $\frac{1}{2}$
150	75	187	93 $\frac{1}{2}$	224	112
151	75 $\frac{1}{2}$	188	94	225	112 $\frac{1}{2}$
152	76	189	94 $\frac{1}{2}$	226	113
153	76 $\frac{1}{2}$	190	95	227	113 $\frac{1}{2}$
154	77	191	95 $\frac{1}{2}$	228	114
155	77 $\frac{1}{2}$	122	96	229	114 $\frac{1}{2}$
156	78	163	96 $\frac{1}{2}$	230	115
157	78 $\frac{1}{2}$	194	97	231	115 $\frac{1}{2}$
158	79	195	97 $\frac{1}{2}$	232	116

*A TABLE telling the Number of Perches
in an Acre to 40 Acres, and the Number
of Perches in every quarter of an Acre to
40 Acres.*

P.	P. in A.	P. in a Q.	P. in h Q.	P. in 3 Q.
1	160	200	240	280
2	320	360	400	440
3	480	520	560	600
4	640	680	720	760
5	800	840	880	920
6	960	1000	1040	1080
7	1120	1160	1200	1240
8	1280	1320	1360	1400
9	1440	1480	1520	1560
10	1600	1640	1680	1720
11	1760	1800	1840	1880
12	1920	1960	2000	2040
13	2080	2120	2160	2200
14	2240	2280	2320	2360
15	2400	2440	2480	2520
16	2560	2600	2640	2680
17	2720	2760	2800	2840
18	2880	2920	2960	3000
19	3040	3080	3120	3160
20	3200	3240	3280	3320
21	3360	3400	3440	3480
22	3520	3560	3600	3640
23	3680	3720	3760	3800
24	3840	3880	3920	3960
25	4000	4040	4080	4120
26	4160	4200	4240	4280
27	4320	4360	4400	4440
28	4480	4520	4560	4600

P.	P. in A.	P. in a Q.	P. in h A.	P. in 3 Q.
29	4640	4680	4720	4760
30	4800	4840	4880	4920
31	4960	5000	5040	5080
32	5120	5160	5200	5240
33	5280	5320	5360	5400
34	5440	5480	5520	5560
35	5600	5640	5680	5720
36	5760	5800	5840	5880
37	5920	5960	6000	6040
38	6080	6120	6160	6200
39	6240	6280	6320	6360
40	6400			

This Table hath five Columns, the first is marked on the Top with A. for Acres; the second is marked on the Top with P. in A. that is the Perches in an Acre; the third is marked with P. in a Q. for the Perches in a Quarter of an Acre; the fourth is marked on the Top with P. in h A. that is the Perches in half an Acre; the fifth is marked with P. in 3Q. that is the Perches in three Quarters of an Acre. The Use of this Table is to tell what Acres and Quarters there is in any Number of Perches, to 6400 Perches, which is 40 Acres. Suppose a Piece of Land 67 Perches in Length and 37 in Breadth, look in the Table for Measuring for the Breadth and Length, and in the Squares is 2479 Perches, then look in this Table for 2479, or the nearest least Number to it, which is 2440 is 15A. 1Q. 39P. putting the

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the 39 Perches to it, there never will be more over than 39 Perches, which you may reckon by your Head thus. you may prove any Number in the Table, or any Number of Perches that you have counted by your Head.

A TABLE to set out Acres at any Length, from 13 to 120 Perches.

L. P.	B. P.	F.	I.	L. P.	B. P.	F.	I.
13	12	5	1	36	4	7	5
14	11	7	1	37	4	5	4
15	10	11	0	38	4	3	5
16	10	0	0	39	4	1	8
17	9	6	9	40	4	0	0
18	8	14	8	41	3	14	10
19	8	6	11	42	3	13	4
20	8	0	0	43	3	11	7
21	7	10	2	44	3	10	6
22	7	4	6	45	3	9	1
23	6	15	9	46	3	7	10
24	6	11	0	47	3	6	7
25	6	6	7	48	3	5	6
26	6	2	6	49	3	4	4
27	5	15	3	50	3	3	3
28	5	11	9	51	3	2	3
29	5	8	6	52	3	1	3
30	5	5	6	53	3	0	3
31	5	2	4	54	2	15	10
32	5	0	0	55	2	15	0
33	4	14	0	56	2	14	1
34	4	11	7	57	2	13	3
35	4	9	5	58	2	12	6

LAND MEASURER.

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L.	B.	F.	I.	L.	B.	F.	I.
P.	P.			P.	P.		
59	2	11	8	90	I	12	10
60	2	11	0	91	I	12	6
61	2	10	3	92	I	12	2
62	2	9	6	93	I	11	10
63	2	8	10	94	I	11	7
64	2	8	3	95	I	11	3
65	2	7	7	96	I	11	0
66	2	7	0	97	I	10	8
67	2	6	4	98	I	10	5
68	2	5	9	99	I	10	I
69	2	5	3	100	I	9	10
70	2	4	8	101	I	9	7
71	2	4	2	102	I	9	4
72	2	3	8	103	I	9	I
73	2	3	I	104	I	8	10
74	2	2	8	105	I	8	7
75	2	2	2	106	I	8	4
76	2	I	8	107	I	8	2
77	2	I	3	108	I	7	11
78	2	0	10	109	I	7	8
79	2	0	5	110	I	7	6
80	2	0	0	111	I	7	3
81	I	16	I	112	I	7	0
82	I	15	8	113	I	6	10
83	I	15	3	114	I	6	7
84	I	14	11	115	I	6	5
85	I	14	6	116	I	6	3
86	I	14	2	117	I	6	0
87	I	13	10	118	I	5	10
88	I	13	6	119	I	5	8
89	I	13	2	120	I	5	6

This Table hath four Columns, the first is the Length in Perches; the second is the Perches in Breadth; the third is the Feet; the fourth is the Inches that maketh an Acre. Suppose it be 56 Perches in Length, look in the first Column for 56, and against that in the second, is two Perches, in the third is 14 Feet, in the fourth is one Inch; that Breadth makes an Acre at 56 Perches long; to Measure the Breadth, make a half Perch and divide it into Feet, and one Foot into Inches, with that you may set out an Acre at any Length to 120, take two or three Breadths you may set out two or three Acres.



A Decimal Table to set out Acres.

Leng.	Breadth.			Leng.	Breadth.		
P.	P.	T.	H.	P.	P.	T.	H.
13	12	3	0	44	3	6	3
14	11	4	2	45	3	5	5
15	10	6	6	46	3	4	7
16	10	0	0	47	3	4	0
17	9	4	1	48	3	3	3
18	8	8	8	49	3	2	6
19	8	4	2	50	3	2	0
20	8	0	0	51	3	1	3
21	7	6	1	52	3	0	7
22	7	2	7	53	3	0	1
23	6	9	5	54	2	9	6
24	6	6	6	55	2	9	1
25	6	4	0	56	2	8	5
26	6	1	5	57	2	8	0
27	5	9	2	58	2	7	5
28	5	7	1	59	2	7	1
29	5	5	1	60	2	6	6
30	5	3	3	61	2	6	2
31	5	1	6	62	2	5	8
32	5	0	0	63	2	5	4
33	4	8	5	64	2	5	0
34	4	7	0	65	2	4	6
35	4	5	7	66	2	4	2
36	4	4	4	67	2	3	8
37	4	3	2	68	2	3	5
38	4	2	1	69	2	3	2
39	4	1	0	70	2	2	8
40	4	0	0	71	2	2	5
41	3	9	0	72	2	2	2
42	3	8	1	73	2	1	9
43	3	7	2	74	2	1	6

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Leng.	Breadth.			Leng.	Breadth.		
P.	P.	T.	H.	P.	P.	T.	H.
75	2	1	3	98	1	6	3
76	2	1	0	99	1	6	1
77	2	0	7	100	1	6	0
78	2	0	5	101	1	5	8
79	2	0	2	102	1	5	6
80	2	0	0	103	1	5	5
81	1	9	7	104	1	5	0
82	1	9	5	105	1	5	2
83	1	9	2	106	1	5	0
84	1	9	0	107	1	4	9
85	1	8	8	108	1	4	8
86	1	8	6	109	1	4	6
87	1	8	4	110	1	4	5
88	1	8	1	111	1	4	4
89	1	7	9	112	1	4	2
90	1	7	7	113	1	4	1
91	1	7	5	114	1	4	0
92	1	7	3	115	1	3	9
93	1	7	2	116	1	3	8
94	1	7	0	117	1	3	6
95	1	6	8	118	1	3	5
96	1	6	6	119	1	3	4
97	1	6	4	120	1	3	3

This

This Book may come where they use customary Measure, as 18 Feet to the Perch, 21 Feet, 24 Feet, or any other customary Perches, I have made a Decimal Table to set out Acres by any of these Perches: The Table hath four Columns, the First is the Length in Perches marked on the Top with Length and P. for Perches; the other Three are marked on the Top with Breadth, under that the Second is marked with P. for Perches, the Third with T. for Tenths of a Perch, the Fourth with H. for hundred Parts of a Perch. Thus you have the Breadth of an Acre to the hundred Part of a Perch standing against the Length: For to set out Acres by this Table, you must provide yourself with a half Perch, half the Length of the Perch you are to measure with, and divide it into five Parts, and one of those Parts divide into ten Parts, they will be hundred Parts of a Perch, the five Parts are tenth Parts of a Perch; for to divide your Perch in ten Parts, the tenth Part of a statute Perch is 19 Inches eight tenth Parts; the tenth Part of the 18 foot Perch is 21 Inches six tenth Parts; the tenth Part of the 21 foot Perch is 25 Inches two tenth Parts; the tenth Part of the 24 foot Perch is 28 Inches eight tenth Parts of an Inch. To mark out the hundred Parts on your half Perch, the hundred Part of a statute Perch is one Inch nine tenth eight hundred Parts of an Inch; the hundred Part of the 18 foot Perch two
Inches

Inches one tenth six hundred Parts of an Inch ; the hundred Part of the 21 foot Perch is two Inches five tenths two hundred Parts of an Inch ; the hundred Part of the 24 foot Perch is two Inches eight tenths eight hundred Parts of an Inch. A half Perch is soonest divided, and is handiest to measure with it, is five tenths of a Perch or half a Perch, when you have about half a Perch, call that half five tenth, then count the remainder on your half Perch, as suppose it be eight tenth four hundred Parts, then take five tenth, which is half a Perch, and measure that which remains with your half Perch and add it to the five tenth, is the same as if you had measured with a whole Perch. Suppose the Length be 59 Perches, look in the first Column for 59, and against that in the other three is two Perches seven tenth one hundred Parts ; first measure the two Perches and the half, which is five tenths, then the two tenths and the one hundred Parts and the Acre is set out. Take Care to measure strait and square, you may measure the Breadth in several Places and mark it out strait, thus you may set out two or three Acres, by taking two or three Acres breadth at any Length to 120, tho' there be several Sorts of Perches, yet 160 makes an Acre of any of them, so the Tables answers all of them.

For to part any Piece of Land into several Pieces, in what Number of Acres you please, first measure off a Piece a little less than the
 Piece

Piece you are to measure, then set out what you lack by the Side and measure it off by the Table, and leave half a Perch between for the Fence, that the Piece may measure the same when the Fences are made; then go to the next and do the same. To set out any Number of Perches under an Acre by the Decimal Table, first divide your Acre into four Parts, for three Quarters take three Parts, for half an Acre take two Parts, for one Quarter take one Part, for 20 Perch take half one Quarter, for ten Perch take half the 20 Perch, for five Perch take half the ten Perch, which is near enough for setting out any Piece of Land. Suppose your Side be 67 Perch long, look in the Table you will find two Perch three tenths one Hundred Parts makes an Acre, to divide that into four Parts, first count the Parts altogether, as two Perch is 20 Tenths and three is 23 Tenths and eight hundred Part, a Quarter of that is 59 Tenths two hundred Parts; for three Quarters of an Acre take three of them, which is one Perch seven Tenths seven hundred Parts, which measure for three Quarters of an Acre; for half an Acre measure out two of those Parts which is one Perch one Tenth nine hundred Parts; for one Quarter of an Acre measure one of those Parts which is five Tenths nine hundred Parts; for 20 Perch measure out half the last, which is two Tenths nine hundred Parts; for ten Perches measure out half the last which is half one Tenths four hundred Parts, for five Perch measure half the last is seven hundred Parts. *A*

A Gauging Table for Casks or open Tubbs.

In.	P.	G.	In.	P.	G.	In.	P.	G.
7	5	1	22	6	26	29	5	57
8	6	1 $\frac{1}{2}$	23	0	27	29	6	58
9	5	2	23	2	28	29	7	59
10	3	2 $\frac{1}{2}$	23	4	29	30	0	60
11	0	3	23	7	30	30	1	61
11	5	3 $\frac{1}{2}$	24	1	31	30	2	62
12	0	4	24	3	32	30	4	63
12	6	4 $\frac{1}{2}$	24	5	33	30	5	64
13	0	5	24	7	34	30	6	65
13	4	5 $\frac{1}{2}$	25	1	35	30	7	66
13	7	6	25	3	36	31	0	67
14	3	6 $\frac{1}{2}$	25	5	37	31	2	68
14	6	7	25	7	38	31	3	69
15	2	8	26	0	39	31	4	70
15	7	9	26	2	40	31	6	71
16	4	10	26	3	41	31	7	72
17	0	11	26	5	42	32	0	73
17	4	12	26	7	43	32	2	74
18	0	13	27	0	44	32	3	75
18	4	14	27	2	45	32	4	76
18	7	15	27	4	46	32	4	77
19	2	16	27	5	47	32	6	78
19	6	17	27	7	48	32	7	79
20	1	18	28	0	49	33	0	80
20	4	19	28	2	50	33	1	81
20	7	20	28	4	51	33	2	82
21	1	21	28	5	52	33	3	83
21	4	22	28	7	53	33	4	84
21	7	23	29	0	54	33	5	85
22	0	24	29	2	55	33	6	86
22	3	25	29	4	56	33	7	87

In.	P.	G.	In.	P.	G.	In.	P.	G.
34	0	88	35	5	101	37	3	116
34	1	89	35	6	102	37	4	118
34	2	90	35	7	103	37	6	120
34	3	91	36	0	104	38	0	122
34	4	92	36	1	105	38	2	124
34	5	93	36	2	106	38	4	126
34	6	94	36	3	107	38	5	128
34	7	95	36	4	108	38	7	130
35	0	96	36	5	109	39	0	132
35	1	97	36	6	110	39	2	134
35	2	98	36	7	111	39	3	136
35	3	99	37	0	112	39	5	138
35	4	100	37	1	114	39	6	140

The Table for gaugeing sheweth how to find the Content of any close Cask, or open Tub, or Copper, or Pail, or any round Vessel, in Ale Gallons, by only putting a strait Stick into the Bung-hole down to the Bottom of the Head, and mark it on the Middle of the Bung-hole, on the Inside cut your Stick asslant at the lower end on the under Side, that it may set close down to the Bottom of the Head, this is called a diagonal Line; for an open Tub put your Measure cross from the Top to the Bottom of the other Side, which is a diagonal as before, if your Tub be broader one way than the other, measure it both ways and put them together, and take the half for the Diagonal. The Table hath three Columns, the First is the Inches and marked on the Top In. the Second

cond is the eighth Part of an Inch and marked on the Top P. the Third is the Gallons and marked on Top Gal. for to find the Content of a Cask, suppose the Diagonal be 21 Inches and four Parts, look in the First Column for 21 Inches, and in the second Column for the four Parts, and against it in the third Column is the Content in Gallons, that is, 22 Gallons; the same for any other Cask, if it be an open Tub of the same Diagonal, it is but half so many Gallons; for in measuring a Cask you measure one End and that gives the Content of both, for it is supposed that both ends are alike, but for an open Tub you must count no more then you measure, which is half, for if you cut a Cask asunder in the midde it makes two open Tubs, that the Table is made for so much more, as you measure for an open Tub of the same Diagonal as the Cask before mentioned 22 Gallons is but 11 Gallons; suppose a Tub broader one way than the other, as 32 Inches one way and 26 Inches and 4 Parts the other; say 32 and 26 is 58 and 4 Parts, the Half is 29 Inches 2 Parts, look in the Table for 29 Inches and 2 Parts and against that is 55, the Half of that is $27\frac{1}{2}$ Gallons the Content of the open Tub. For to gauge a Copper gauge a Pail first, and fill the Crown first and count what that holds first, then take the Diagonal off by the Water and look for it in the Table as before directed, and half that Sum is the Content above the Water, then add the Wa-
ter

ter in the Crown to it, that is the whole Content in Ale Gallons; thus you may tell what any Cask or open Tub will hold from one Gallon to 140 for a Cask, and from one Gallon to 70 Gallons for any open Tub, or Copper, or round Vessel.

I have put half Gallons in the Table as far as six Gallons, and you may measure from half a Gallon to 10 or 12 Gallons, or farther, by putting the two Numbers before and behind it together, and taking the half of it for half a Gallon, or add half the Difference to the least Sum is the same; I have divided the Inch into eight Parts, because it agrees with the half Quarters; on the Rule take care to have a strait Stick to take the Dimensions with, and to measure it true on the Rule, and this will give the Content near enough for common Use, but not quite exact; as indeed there is no great Exactness in Cask-gauging they are so very irregular on the Inside.

F I N I S.

Q

Figure y.^e 1.st

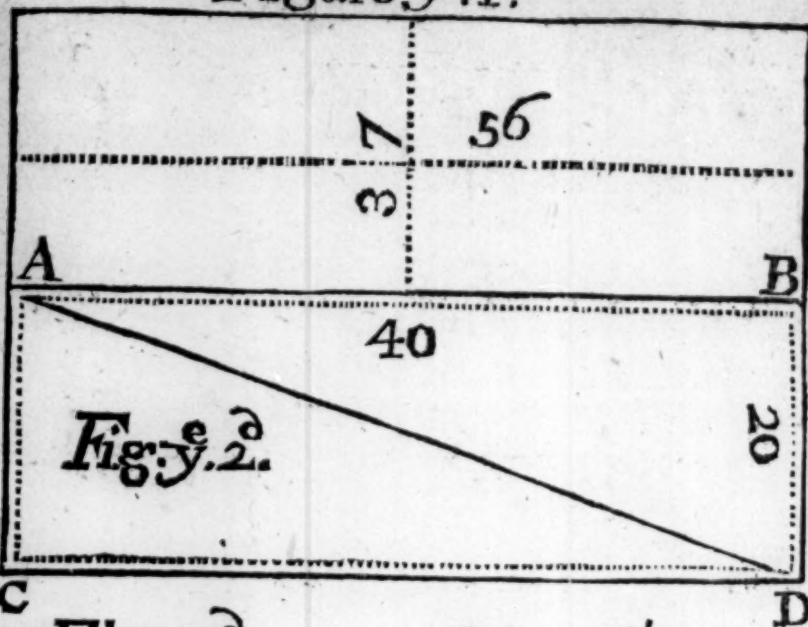


Fig. y.^e 2.

C

Fig. 3.^d



Fig. 4.th

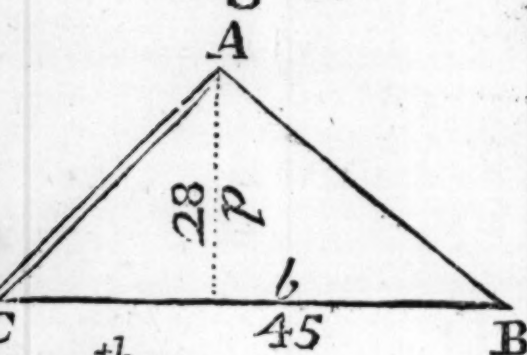
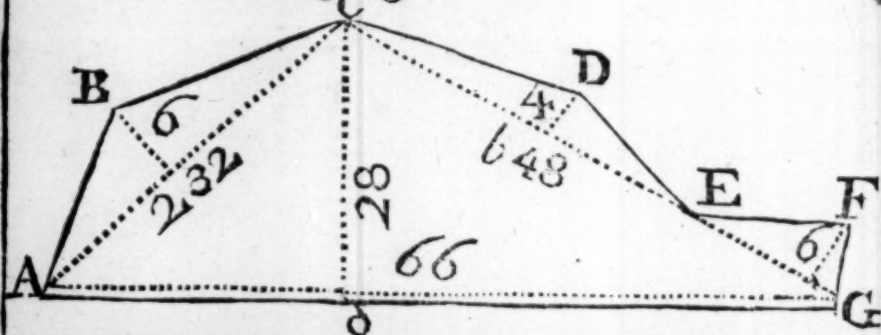


Fig. 5.th



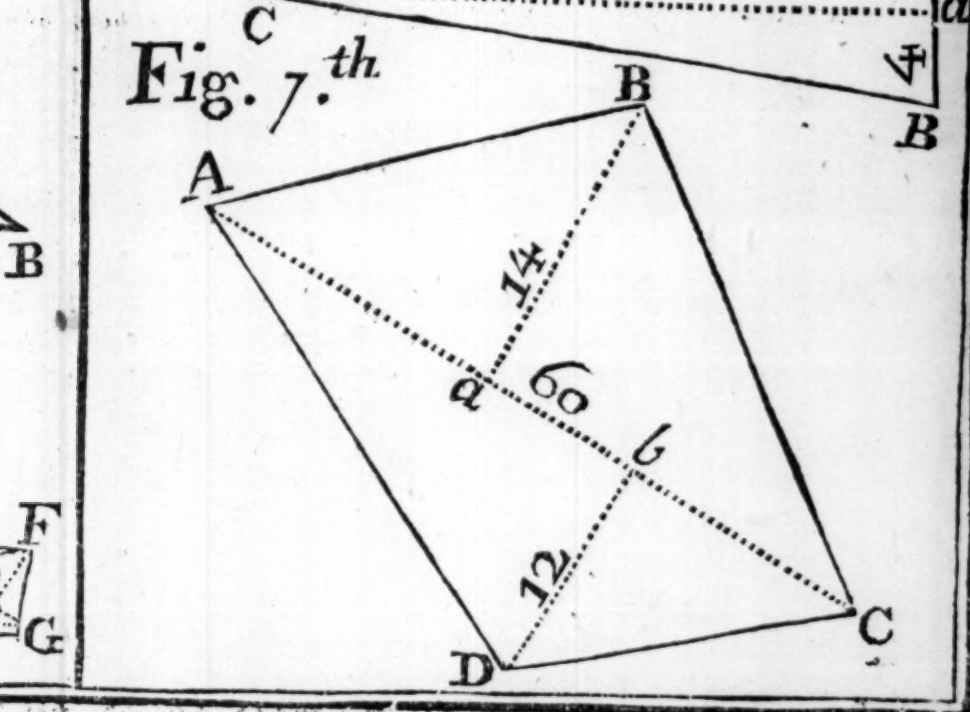
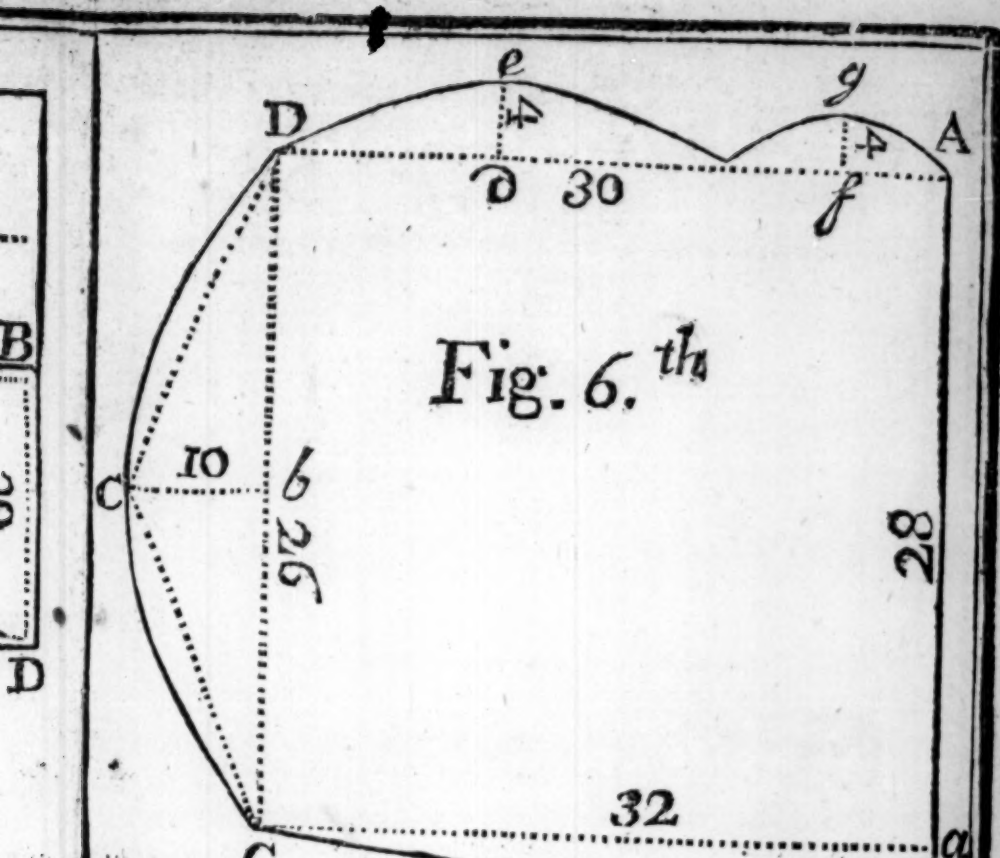


Fig. 8.th is two B Fields joyning

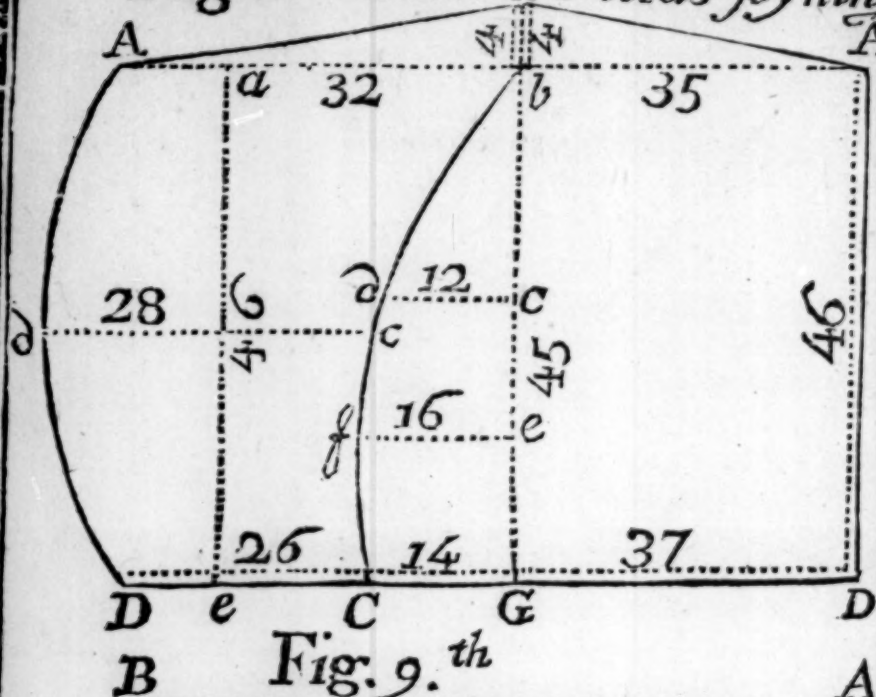


Fig. 9.th

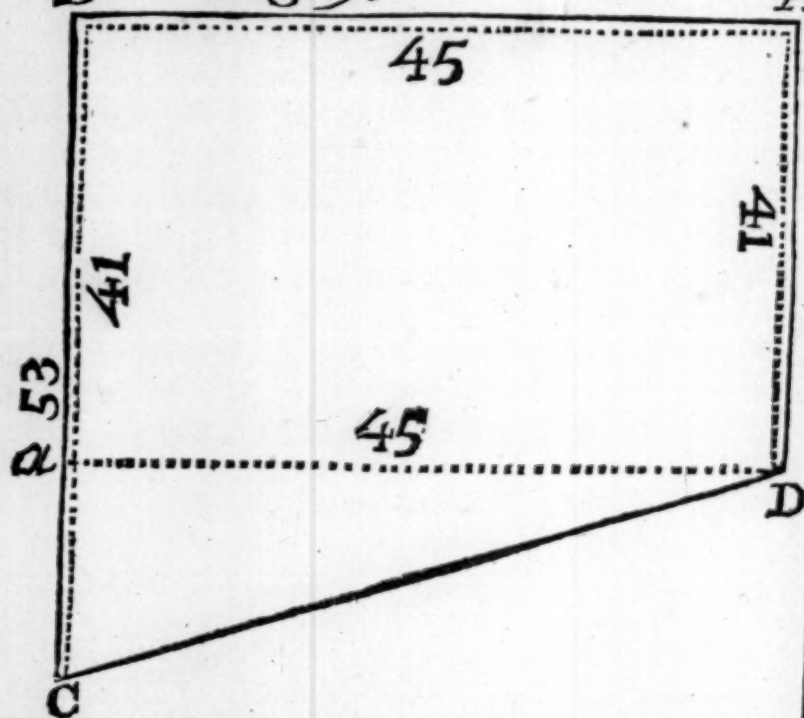


Fig. 10.th

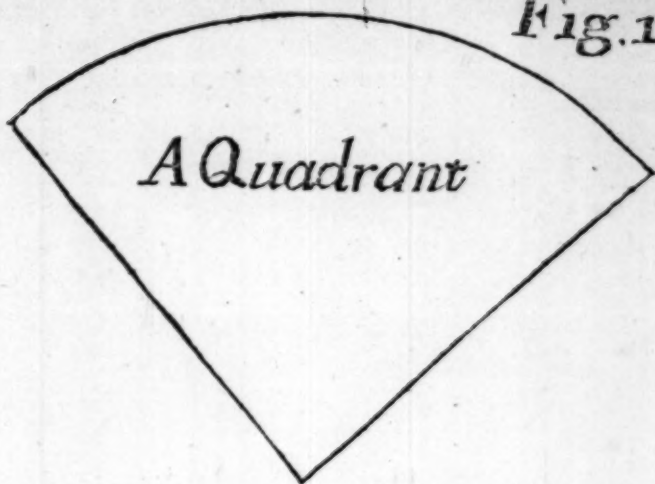


Fig 11.th

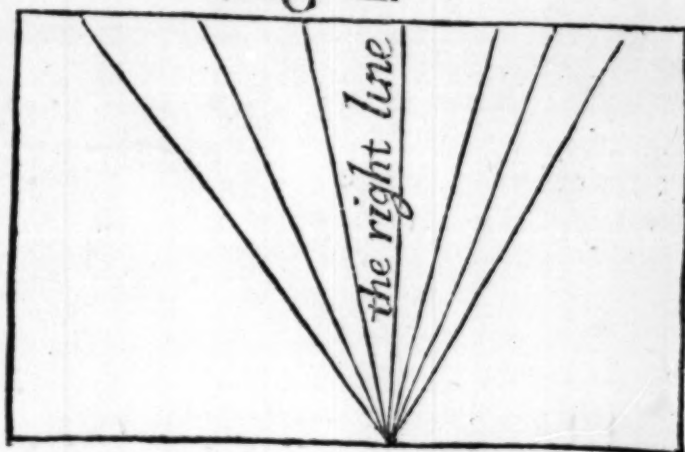


Fig. 12.th

A. Square Spacer

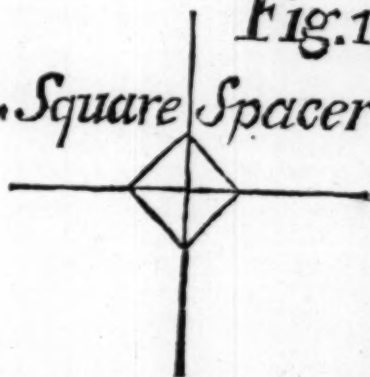


Fig. 13.th

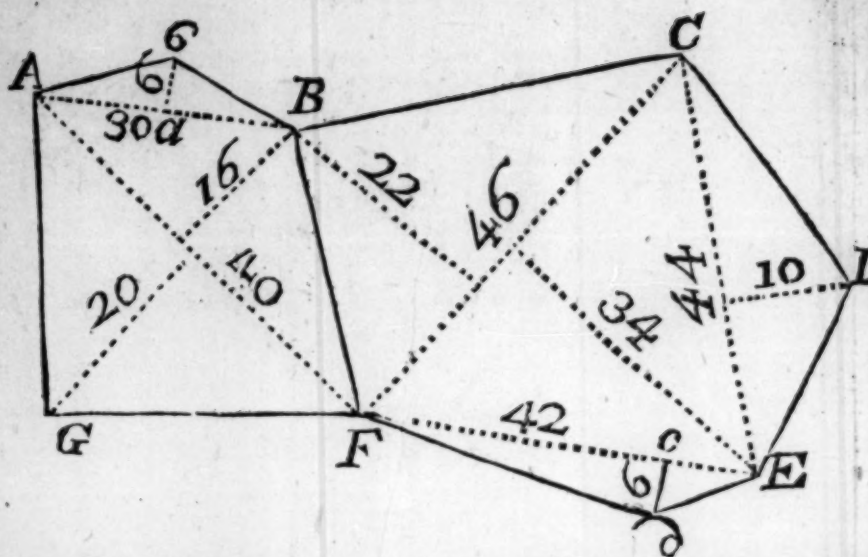


Fig. 14.th

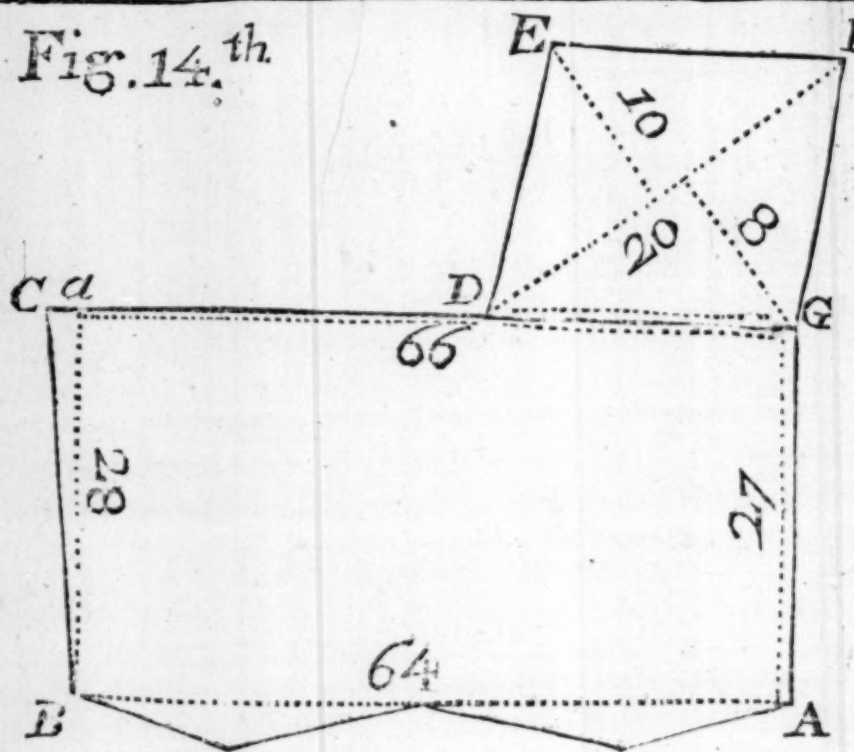


Fig. 15.th

4	2									4	2
3	1									3	2
2		1	2	3	4	5	6	7	8	9	2
1		2									1
		3									
		4									
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